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Sediment Data

Alberta

Données sur les sédiments

1990

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WATER SURVEY OF CANADA
OTTAWA, CANADA, 1992

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PREFACE

This publication was prepared by personnel of the Sediment Survey Section, Water Survey of Canada Division, under the direction of the Director, Water Resources Branch, Department of the Environment, Ottawa.

The basic data were collected and compiled under the supervision of the Chief, N.W.T. Programs, Yellowknife, Northwest Territories and the Regional Chief of the Water Resources Branch at Vancouver, British Columbia.

The co-operation received from provincial agencies and from other organizations is gratefully acknowledged.

PRÉFACE

Le groupe d'étude des sédiments de la Division des relevés hydrologiques du Canada, sous l'autorité du directeur des Ressources en eau du ministère de l'Environnement, à Ottawa, a préparé la présente publication.

Le Chef des programmes des T.N.-O., à Yellowknife (Territoires du Nord-Ouest) et le chef régional de la Direction des ressources en eau, à Vancouver (Colombie-Britannique), ont supervisé la collecte et la compilation des données de base.

Nous remercions vivement les organismes provinciaux, ou autres, pour leur collaboration.

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INTRODUCTION

The Water Resources Branch of the Department of the Environment herein presents for the 1990 calendar year the annual suspended sediment data and a historical data summary for the sediment survey investigations conducted in Alberta by the Water Survey of Canada.

Data on the character and quantity of fluvial sediments provided by sediment survey investigations are intended for use in studies of water quality, environmental impacts, river processes and behaviour, and engineering design.

General introductory information on the sediment survey is included in this publication. Similar information for the associated hydrometric survey is given in the regular publications containing surface water data.

Details on individual stations and related records, as well as recent data that have not yet been published, may be obtained upon application to:

Water Resources Branch,
Department of the Environment,
Bag 2909,
Postal Station 'M',
(Room 854,
220-4th Avenue S.E.),
Calgary, Alberta.
T2P 2M7
(403 292-5315)

or to the Director, Surveys and Information Systems Branch, Department of the Environment, Ottawa, Ontario, K1A 0H3 (819 997-2098).

INTRODUCTION

Dans la présente publication de la Direction des ressources en eau du ministère de l'Environnement, on trouvera les données annuelles sur les sédiments en suspension pour 1990 et le commaire des données chronologiques sur les sédiments, à la suite des études effectuées dans les cours d'eau de l'Alberta par la Division des relevés hydrologiques du Canada.

Les données recueillies sur la nature et l'importance de la charge solide dans les cours d'eau doivent servir aux études portant sur la qualité des eaux, les incidences environnementales, les processus fluviaux, le comportement des cours d'eau et la conception de projets.

La presente publication contient des renseignements généraux préliminaires sur les études des sédiments. Des renseignements semblables sur les études hydrométriques connexes sont contenus dans les publications régulières présentant des données sur les eaux de surface.

On peut obtenir des renseignements supplémentaires sur les stations et les relevés, ainsi que des données récentes non encore publiées, en s'adressant au:

Direction des ressources en eau
Ministère de l'Environnement
Sac postal 2909
Succursale postale 'M'
(Pièce 854,
220, Quatrième avenue S.-E.)
Calgary (Alberta)
T2P 2M7
(403 292-5315)

ou au Directeur, Relevés et systemes d'information, ministère de l'Environnement, Ottawa (Ontario), K1A 0H3 (819 997-2098).

SCOPE OF PUBLICATION

Descriptive information about sediment stations is given. This refers to the Location, Latitude and Longitude, Drainage Area and whether the flow is Natural Flow or Regulated Flow (the year that regulation began is given, if known), Type of Gauge and the Total Suspended Sediment Load in Tonnes for the Period of Record is also included. International Gauging Stations are identified and the names of co-operating agencies who supply data are given; unusual conditions at the sediment station that could affect the data results are explained under "Remarks".

This publication contains data on streamflow, instantaneous suspended sediment concentration; daily mean suspended sediment concentration; daily suspended sediment loads; dissolved solids concentration; load summary; particle-size distribution of suspended sediment in percent sand, silt and clay; bed load and bed material; water temperature when samples were collected; type of sampler and the single sampling vertical location.

A historical sediment data summary includes such information as Sampled Concentration Maximum and Minimum; Suspended Sediment Load Maximum Daily and the Total for Period. The Period of Record and the Type of Operation for each year of data are also given. A Summary for the Months of record gives the Period of Record Mean, the Mean for Period of Record and the Standard Error of Mean as a percent.

HISTORY AND OBJECTIVES OF SEDIMENT SURVEYS IN CANADA

In Canada, investigations of sediment transported by streams were first undertaken by individual organizations or agencies in 1948, to meet the needs of federal and provincial agencies for assessment of particular projects. Although the investigations were extended to meet expanding needs after 1948, it was not until 1961 that a systematic survey was undertaken by the Water Resources Branch.

The sediment survey program has the following objectives:

(1) Collection and provision of data related to sediment transport in Canadian rivers for applications in water resource engineering, water quality and environmental studies.

(2) Provision of information and advice related to sediment transport.

(3) Assessment, improvement and standardization of equipment and techniques used in Canada's sediment survey program.

PUBLICATION OF SEDIMENT DATA

Sediment data have been published in a variety of formats since the beginning of the Sediment Survey Program.

PORTÉE DE LA PUBLICATION

Des données descriptives sont présentées sur les stations d'étude des sédiments. Elles concernent leur emplacement, leurs latitude et longitude, leur bassin versant, la nature de débit (naturel ou régularisé, avec indication, le cas échéant, de l'année où la régularisation a commencé, si elle est connue), le type d'instrument de mesure employé et le débit total des sédiments en suspension (en tonnes) pour la période de relevé. Les stations internationales de jaugeage sont indiquées, ainsi que le nom des organismes qui fournissent les données. Des explications concernant des conditions exceptionnelles qui ont pu influer sur les résultats sont présentées dans la partie «Remarques».

Cette publication renferme des données sur le débit des cours d'eau, les concentrations instantanées de sédiments en suspension, les concentrations journalières moyennes de sédiments en suspension, les débits journaliers de sédiments en suspension, les concentrations de matières dissoutes, les débits solides totaux (résumés), la granulométrie des sédiments en suspension exprimée en pourcentage de sable, de limon et d'argile, le charriage et les matériaux du lit, la température de l'eau au moment de l'échantillonnage, le type d'échantillonneur employé et l'emplacement des verticales de prélèvement d'échantillons uniques.

Un résumé des données historiques sur les sédiments est inclus. On y trouve divers renseignements comme les concentrations maximale et minimale mesurées, le débit journalier maximal des sédiments en suspension et le total pour la période. La période de relevé et le type d'exploitation des stations sont indiqués pour chaque année. Dans un résumé pour les mois de relevé, on donne la moyenne pour chaque période et pour l'ensemble des périodes de relevé ainsi que l'erreur-type de la moyenne, en pourcentage.

HISTORIQUE ET OBJECTIFS DES ÉTUDES DES SÉDIMENTS AU CANADA

Au Canada, les études dans ce domaine ont débuté en 1948 en réponse aux besoins exprimés par certains organismes fédéraux et provinciaux pour l'évaluation de projets donnés et étaient le fait d'organismes privés. Bien que les études se soient poursuivies après 1948 pour satisfaire aux besoins accrus, ce n'est qu'en 1961 que la Direction des ressources en eau les a entreprises de façon systématique.

Les buts de ces études sont de:

(1) réunir et produire des données sur les transports solides dans les cours d'eau canadiens, données dont on peut avoir besoin pour des études concernant l'environnement, la qualité des eaux et la conception de projets portant sur les ressources en eau.

(2) produire des informations concernant les transports solides.

(3) évaluer, améliorer et uniformiser le matériel et les techniques employés dans le programme d'étude des sédiments au Canada.

PUBLICATION DES DONNÉES SUR LES SÉDIMENTS

Depuis le début du programme d'étude des sédiments, la présentation des données a varié.

During the years 1948 to 1960, some sediment data were collected for several Prairie rivers to meet the needs of particular projects. The first Water Resources Paper series containing sediment data incorporated a selection of these data and also data for part of the year ending September 30, 1961, at stations established for the continuing program. The second issue was a biennial publication covering only the continuing program for the 1962 and 1963 water years. All subsequent editions titled *Sediment Data Canadian Rivers* have been published annually. The sediment data since 1978 have been presented entirely in the International System of Units (SI).

Commencing with 1984, the *Sediment Data* were published in a new format wherein Canada was divided into eight regions. The provinces each represent a separate region except for New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island, which together form the Atlantic Provinces region, and the Yukon and Northwest Territories which make up another. The publications are identified by the province or territories covered and the year in which the data were collected. These data are published annually on a calendar-year basis and the stations are listed alphabetically.

A new edition, *Miscellaneous Sediment Data 1966 to 1983*, was published. It contains a tabulation of locations in Canada where miscellaneous data were collected but not previously published by the Water Survey of Canada. The following data are included in this one time publication: date and time of sample collection; instantaneous discharge or daily mean discharge; sampling vertical; instantaneous concentration; dissolved solids for some samples; type of sampler used; particle size distribution of suspended sediment in percent sand, silt and clay for some depth integrated samples and/or measurements, and some point integrated measurements; particle size distribution of bed load; particle size distribution of bed material; and the water temperature at time of sampling for some samples is also given where available.

The first edition of a *Sediment Data Reference Index* was published for data to 1972. It contains a tabulation of locations in Canada where sediment data were collected by the Water Survey of Canada. The index has been subdivided alphabetically by province or territory, with sediment survey stations also listed alphabetically. Commencing with the 1978 publication, data are presented in the International System of Units (SI) and will continue to be published biennially. The latest edition supersedes all previous editions because it contains any corrections or additions since the last publication.

The first edition of a new publication series titled *Historical Sediment Data Summary for Canadian Rivers* was produced for data to 1974. This publication contains a summary of historical monthly and annual mean suspended sediment load, and annual extremes of daily suspended sediment concentration and loads and total annual suspended load. Commencing with the 1978 publication, data are presented entirely in the International System of Units (SI). This publication has been discontinued, as much of the information is now included in the new annual *Sediment Data* publication.

De 1948 à 1960, on a recueilli des données pour plusieurs cours d'eau des Prairies en prévision de la réalisation de certains projets. La première publication contenant des données sur les sédiments a paru dans la série intitulée *Water Resources Paper*; elle présentait un choix de ces données ainsi que des données recueillies en 1961 avant le 30 septembre à des stations établies pour la réalisation du programme permanent. La deuxième publication a porté sur les données recueillies dans le cadre du programme au cours des années hydrologiques 1962 et 1963. Par la suite, les données ont été publiées annuellement sous le titre *Données sur les sédiments - rivières canadiennes*. Depuis 1978, les données sont exprimées en unités du Système international (SI).

En 1984, la présentation des *Données sur les sédiments* a été modifiée. Le Canada a été divisé en huit régions, une région pour chaque province, sauf le Nouveau-Brunswick, Terre-Neuve, la Nouvelle-Écosse et l'Île-du-Prince-Édouard qui, ensemble, forment la région des provinces de l'Atlantique, et les Territoires du Yukon et du Nord-Ouest, qui forment une autre région. Les publications sont nommées selon la région couverte et l'année des données (année civile). Ces publications sont annuelles. Les stations y sont présentées par ordre alphabétique.

Une édition récente intitulée *Données diverses sur les sédiments, 1966 à 1983* vient de paraître. On y présente sous forme de tableau les emplacements où des données diverses non encore publiées ont été recueillies au Canada par la Division des relevés hydrologiques. Cette première édition comprend des données telles que : la date et la durée de l'échantillonnage; le débit instantané ou débit journalier moyen; la verticale d'échantillonnage; les concentrations instantanées; les concentrations de matières solides en solution pour certains échantillons; le type d'échantillonneur employé; la granulométrie des sédiments en suspension en pourcentage de sable, de limon et d'argile, dans le cas de mesures avec intégration selon la profondeur ou d'échantillons intégrés sur toute la profondeur, et dans le cas de mesures par la méthode ponctuelle; la granulométrie du charriage; la granulométrie des matériaux du lit; la température de l'eau lors du prélèvement d'échantillons, lorsque celle-ci est connue.

Un *Index de référence des données sur les sédiments* est publié. La première édition portait sur les données disponibles jusqu'en 1972. Les emplacements où des données sur les sédiments ont été recueillies au Canada par la Division des relevés hydrologiques y sont présentés sous forme de tableau. L'*Index* est subdivisé selon l'ordre alphabétique par province ou territoire, et les stations de mesure des sédiments sont classées par ordre alphabétique. À partir de 1978, les données sont exprimées en unités du Système international (SI). L'*Index* est publié tous les deux ans; l'édition la plus récente annule toutes les éditions antérieures, car elle renferme toutes les corrections et mises à jour effectuées depuis la dernière parution.

Une autre série de publications a porté le titre *Sommaire chronologique des données sur les sédiments de rivières canadiennes*. La première édition renfermait les données disponibles jusqu'en 1974. Cette série présentait un résumé donnant les moyennes mensuelles et annuelles historiques du débit des sédiments en suspension, les valeurs annuelles extrêmes de la concentration journalière et du débit journalier des sédiments en suspension et le débit annuel total des sédiments en suspension. À partir de 1978, les données ont été présentées en unités du Système international (SI). Cette série a été abandonnée, car une bonne partie de l'information est maintenant contenue dans la nouvelle publication annuelle intitulée *Données sur les sédiments*.

COLLECTION AND PROCESSING OF BASIC DATA

1. *Equipment and Instrumentation*

The sediment survey program of the Water Resources Branch is conducted in cross sections on rivers selected specifically for the sediment survey or for the hydrometric survey. Certain cross sections are located at traffic bridges, while others are equipped with cableways, or automatic pump samplers.

The following sediment samplers have been used in the sediment survey program:

(a) Depth-integrating suspended sediment wading-type hand sampler, USDH-48, used on small streams or during winter periods.
(b) Depth-integrating suspended sediment sampler, USDH-59, used as a handline suspension for small and medium size streams.
(c) Depth-integrating suspended sediment samplers, USD-49, and USD-74, used on a reel suspension for medium and large streams whose depths are less than five metres.

(d) Point-integrating suspended sediment samplers, USP-61, USP-61-A1, USP-63, and USP-72, used for point-integrating sampling, or depth-integrating sampling if the depth is over five metres, or in a cross section with velocities up to two metres per second.
(e) Automatic pump sampler is an automatic pumping system permitting unattended collecting and bottling of individual water samples pumped from a fixed point in a stream. This sampler is normally installed at isolated locations where otherwise no data would be available during ice break-up or peak periods.

(f) Bed material sampler, USBM-54, used on large or deep streams or on those streams with hard-packed streambeds.

(g) Bed material sampler, USBMH-60, used on some large or deep streams or on those streams with soft-packed streambeds.

(h) Bed material sampler, USBMH-53, used on some small or shallow streams.

(i) Lane bed material sampler, a drag-type sampler used on small streams or those with soft streambeds.

2. *Hydrometric Surveys*

The hydrometric survey includes the standard procedures for observations of water levels, streamflow measurements, water surface slope determinations if required, and observations of water temperature. The streamflow measurements are made in conjunction with the sediment load measurements and conform to the accepted standards of the regular hydrometric survey.

3. *Sediment Sampling Program*

The following is a summary of the elements associated with the Sediment Sampling Program:

(a) Periodic measurement of suspended sediment load by the

COLLECTE ET TRAITEMENT DES DONNÉES DE BASE

1. *Matériel*

L'étude des sédiments réalisée par la Direction des ressources en eau porte sur des sections transversales de cours d'eau choisis spécialement à cette fin ou pour les relevés hydrométriques. Certaines sections sont situées sous un pont, d'autres sont accessibles par téléphérique, ou sont étudiées à l'aide d'un échantillonneur sous pression.

On a utilisé les échantillonneurs suivants:

(a) L'échantillonneur intégrateur selon la profondeur, type simple, USDH-48, employé dans les cours d'eau peu profonds ou en hiver;
(b) L'échantillonneur intégrateur selon la profondeur USDH-59, utilisé comme une ligne dans les cours d'eau petits et moyens;
(c) Les échantillonneurs intégrateurs selon la profondeur USD-49 et USD-74 fixés au bout d'une corde s'enroulant autour d'un moulinet et employés dans les cours d'eau gros ou moyens dont la profondeur est inférieure à cinq mètres;
(d) Les échantillonneurs intégrateurs USP-61, USP-61-A1, USP-63 et USP-72, employés ponctuellement ou sur toute la verticale, et utilisés lorsque la profondeur est supérieure à cinq mètres ou dans les sections transversales qui connaissent un débit qui atteint 2 m/s.
(e) Un échantillonneur automatique permettant le prélèvement en bouteilles, sans surveillance, d'échantillons uniques d'eau obtenus à l'aide d'une pompe en un point précis d'un cours d'eau; il est ordinairement installé dans un endroit isolé où aucune donnée ne pourrait être obtenue autrement au cours de la débâcle ou des périodes de débit de pointe;
(f) L'échantillonneur USBM-54 employé pour le prélèvement d'échantillons des matériaux du lit dans les cours d'eau importants ou profonds ou dans les cours d'eau dont le fond est dur;
(g) L'échantillonneur USBMH-60 employé pour le prélèvement d'échantillons des matériaux du lit dans certains cours d'eau importants ou profonds, ou dans les cours d'eau dont le fond est meuble;
(h) L'échantillonneur USBMH-53 employé pour le prélèvement d'échantillons des matériaux du lit dans certains cours d'eau petits ou peu profonds;
(i) La drague employée pour le prélèvement d'échantillons des matériaux du lit dans de petits cours d'eau ou dans des cours d'eau dont le fond est meuble.

2. *Relevés hydrométriques*

Le relevé hydrométrique comprend, entre autres, l'observation de la hauteur des eaux, la mesure du débit de l'eau, la détermination de la pente de la ligne d'eau, si nécessaire, ainsi que l'observation de la température de l'eau. Les mesures du débit de l'eau et du débit des sédiments se font conjointement, suivant les méthodes acceptées.

3. *Échantillonnage des sédiments des cours d'eau*

L'échantillonnage comporte, en gros, les éléments suivants:

(a) La mesure périodique du débit des sédiments en suspension par la méthode d'intégration sur toute la profondeur

depth-integrating method for determining the average suspended sediment concentration in the cross section.

(b) Single suspended sediment samples at a selected vertical for determining the sediment concentration for the days when suspended sediment load measurements are not taken.

(c) Limited measurement of suspended sediment load by the point-integrating method for checking depth-integrated measurements and for determining particle-size distribution in the cross section.

(d) Sampling of bed material for determining particle-size distribution.

(e) Periodic measurement of bed load.

The following is a brief explanation of the elements listed above:

(a) *Suspended Sediment Load by Depth-Integrating Method*: Measurements are made by the depth-integrating method to determine the suspended sediment load in the entire cross section of a stream, the average suspended sediment concentration in the cross section, and the size distribution of the sediment particles. It is known that the concentration of suspended sediment tends to increase from the water surface to the streambed and could vary from streambank to streambank.

When making suspended sediment equal-discharge-increment (EDI) measurements, the stream cross section is divided into at least five equal-flow panels and a representative suspended sediment sample is collected from each portion. For each panel of the cross section, the suspended sediment load (r) may then be computed by multiplying the flow (q) by the suspended sediment concentration (c):

$$r = q\ c$$

The suspended sediment load (R) for the cross section may be computed by adding the sediment loads for the five equal-flow panels:

$$R = r\ n = q_1c_1 + q_2c_2 + \ldots + q_nc_n$$

The depth-integrating method of sampling is used to measure the suspended sediment concentration. This method is based on the premise that the sampler fills at a rate proportional to the velocity of the approaching flow, and that by traversing the depth of a stream at a uniform speed, the sampler will receive a portion of water sediment mixture at every point in the vertical.

(b) *Single Suspended Sediment Samples at a Selected Vertical*: Single suspended sediment samples, consisting of two bottles each, are collected routinely using the depth or point-integrating samplers at a permanently fixed vertical in a cross section. During periods of very heavy sediment concentration, two or three single sediment samples may be taken per day, while during periods of low concentration, one single sediment sample may only be taken every few days. During extremely low flow periods, the sampling may be limited to one single sample in several weeks or months.

(c) *Suspended Sediment Load by Point-Integrating Method*: A limited number of suspended sediment load measurements are made by the point-integrating method. These measurements are included in the program (a) to check by comparison the "measured" sediment loads obtained by the depth-integrating method with the suspended sediment loads by the point-integrating method and (b) to obtain samples from which to determine particle-size distribution

pour la détermination de la concentration moyenne dans une section transversale;

(b) Le prélèvement d'échantillons uniques des sédiments en suspension selon une verticale choisie, afin de déterminer la concentration des sédiments les journées où le débit des sédiments en suspension n'est pas mesuré;

(c) Un nombre restreint de mesures du débit des sédiments en suspension avec intégration en un point précis d'un cours d'eau, afin de vérifier les résultats des mesures avec intégration selon la profondeur et afin de déterminer la granulométrie des particules de sédiments dans une section transversale d'un cours d'eau;

(d) L'échantillonnage des matériaux du lit afin d'en déterminer la granulométrie;

(e) La mesure périodique du charriage.

Voici une brève description des éléments susmentionnés.

(a) *Mesure du débit des sédiments en suspension par intégration selon la profondeur*: La méthode permet de déterminer le débit des sédiments en suspension traversant toute une section transversale d'un cours d'eau, la concentration moyenne des sédiments en suspension dans la section transversale et la granulométrie des sédiments en suspension. C'est un fait connu que la concentration des sédiments en suspension augmente généralement avec la profondeur et qu'elle peut varier d'une rive à l'autre d'un cours d'eau.

Avec la méthode d'incréments de débits égaux (IDE), la mesure du débit des sédiments en suspension se fait en divisant une section transversale d'un cours d'eau en au moins cinq tranches où le débit est égal et en prélevant un échantillon représentatif dans chacune d'elles. Le débit des sédiments en suspension (r) pour chaque tranche se calcule en multipliant le débit (q) par la concentration des sédiments en suspension (c):

$$r = q\ c$$

Le débit des sédiments en suspension (R) pour la section transversale est la somme des débits des sédiments des cinq tranches:

$$R = r\ n = q_1c_1 + q_2c_2 + \ldots + q_nc_n$$

La méthode par intégration sur toute la profondeur est employée pour mesurer la concentration des sédiments en suspension. Elle suppose que l'échantillonneur se remplit à un rythme proportionnel au débit de l'eau et qu'en étant déplacé à une vitesse uniforme sur toute la verticale, il reçoit une partie du mélange eau-sédiments à tous les points de celle-ci.

(b) *Prélèvement d'échantillons uniques de sédiments en suspension sur une verticale choisie*: De tels échantillons, constitués chacun de deux bouteilles, sont prélevés régulièrement à l'aide d'appareils intégrateurs, selon la profondeur ou ponctuels, sur une verticale permanente d'une section transversale. Lorsque la concentration des sédiments est très forte, deux ou trois échantillonnages peuvent être effectués chaque jour, alors qu'un seul échantillon peut être prélevé à quelques jours d'intervalle lorsqu'elle est faible. Au cours des périodes où le débit est extrêmement faible, l'échantillonnage peut être limité à un échantillon toutes les quelques semaine ou tous les quelques mois.

(c) *Mesure du débit des sédiments en suspension par la méthode ponctuelle*: Un nombre limité de mesures du débit des sédiments en suspension sont faites avec cette méthode. On y a recours a) pour vérifier les valeurs du débit mesurées au moyen de la méthode précédente et b) pour obtenir des échantillons en vue de déterminer la granulométrie des sédiments en divers points de la

at different points in the cross section. The point-integrating sediment loads are computed by graphical methods.

The relationship between the suspended sediment concentration of the single vertical samples and the average concentration in the cross section determined from the suspended sediment load measurements is established for some stations. Using this relationship, the sediment concentrations of the single vertical samples are adjusted to reflect the average suspended sediment concentration in the cross section. These average sediment concentrations in the cross sections are plotted, and a smooth curve is drawn through the points to obtain a concentration graph. This graph represents the average suspended sediment concentration for the period of record. The daily mean concentrations are determined by automated procedures using a digitizer interfaced with a Digital minicomputer.

The daily suspended sediment loads are computed on the basis of stream discharges and the collected suspended sediment concentrations. The daily suspended sediment loads are expressed in tonnes per day and are obtained by multiplying the daily mean sediment concentration (mg/L), by the daily mean discharge (m^3/s), and the conversion factor, 0.0864.

(d) *Bed Material Sampling*: In a cross section, bed material samples are usually taken in the same sampling verticals as the suspended sediment samples. Often, additional bed material samples are collected at the water edge, the extreme water level or at other points in the cross section. The total number of bed material samples taken in a cross section usually varies between five and nine.

(e) *Bed Load Measurement*: There are several methods available for measurement of bed load (volumetric method, measurement by samplers, method of tracers, method of constricted cross section, study of sound waves, etc.). The measurement methods should be selected in accordance with river regime.

4. *Total Sediment Load*

Sediment transport may be divided into two categories: sediment maintained in suspension in the stream (suspended load), and sediment being carried along the streambed (bed load). To measure the total sediment load, each of these must be measured separately and then totalled. The total sediment load was not computed for this publication.

5. *Sediment Survey Laboratories*

The Water Resources Branch maintain sediment survey laboratories in New Westminster, British Columbia; Regina, Saskatchewan; Guelph, Ontario; and Moncton, New Brunswick. The laboratories are equipped to perform the following analyses:

(a) determination of sediment concentration by (1) filtration method, (2) evaporation method and (3) determination of total dissolved solids by evaporation method.
(b) particle-size distribution analysis by (1) bottom withdrawal tube method, (2) sieving and (3) hydrometer method.

Determination of the sediment concentration by the evaporation method is carried out by evaporating the water from the settled sediment sample, with the results being corrected for dissolved solids. The quantity of dissolved solids is determined by evaporating a portion of the decanted water of a sample. In the filtration method, the suspended sediment concentration of water samples is determined by utilizing Gooch crucibles with a Reeve Angel 934AH filter and a Millipore AP20 prefilter and a vacuum system.

section transversale. Cette méthode fait appel à des graphiques pour le calcul du débit des sédiments.

Le rapport entre la concentration des sédiments en suspension dans les échantillons prélevés sur une seule verticale et la concentration moyenne dans la section transversale, telle que déterminée à partir des mesures du débit des sédiments en suspension, est établi pour quelques stations. Il permet de corriger les concentrations mesurées à une seule verticale de manière à donner la concentration moyenne dans la section transversale. Les concentrations moyennes ainsi déterminées sont reportées sur un graphique, et une courbe lisse passant par les points marqués est tracée. Le graphique obtenu représente la concentration moyenne des sédiments en suspension pour la période de relevé. Les concentrations moyennes quotidiennes sont déterminées automatiquement à l'aide d'un convertisseur analogique-numérique relié à un mini-ordinateur numérique.

Les valeurs journalières du débit des sédiments en suspension sont calculées à partir du débit du cours d'eau et des concentrations des sédiments en suspension recueillis. Elles sont exprimées en tonnes par jour. On les détermine en multipliant la concentration moyenne journalière des sédiments (mg/L) par le débit moyen journalier (m^3/s) et par un facteur de conversion approprié, 0.0864.

(d) *Échantillonnage des matériaux du lit*: Dans une section transversale, les échantillons des matériaux du lit sont ordinairement prélevés aux mêmes verticales que ceux des sédiments en suspension. Souvent, des échantillons supplémentaires sont pris près des rives, là où le niveau d'eau est extrême et à d'autres points de la section transversale. Leur nombre total pour une section donnée varie ordinairement entre cinq et neuf.

(e) *Mesure du charriage*: La mesure peut se faire par plusieurs méthodes (méthode volumétrique, mesure à l'aide d'échantillonneurs, méthode des traceurs, méthode de la section transversale rétrécie, étude des ondes sonores, etc.). Le choix se fondera sur la nature du régime du cours d'eau.

4. *Débit solide total*

Il y a deux catégories de sédiments: les sédiments maintenus en suspension au sein de l'eau (sédiments en suspension), et les sédiments charriés sur le lit d'un cours d'eau (charriage de fond). Les deux types de sédiments doivent être mesurés séparément et leurs valeurs additionnées si on veut mesurer le débit total des sédiments. Toutefois, on ne l'a pas calculé aux fins de la présente publication.

5. *Laboratoires d'analyse*

La Direction des ressources en eau possède des laboratoires d'analyse des sédiments à New Westminster (Colombie-Britannique), Regina (Saskatchewan), Guelph (Ontario) et Moncton (Nouveau-Brunswick). Les laboratoires disposent des appareils nécessaires pour effectuer les analyses suivantes:

(a) la détermination de la concentration des sédiments par (1) filtration, (2) évaporation, et (3) détermination des matières dissoutes totales par évaporation.
(b) l'analyse granulométrique (1) par extraction des sédiments déposés dans un tube, (2) par l'emploi de tamis et (3) par l'utilisation d'un hydromètre.

La méthode par évaporation consiste à faire évaporer l'eau d'un échantillon de sédiments décanté et à corriger les résultats pour tenir compte des matières dissoutes. La quantité de celles-ci est déterminée en faisant évaporer une partie de l'eau de l'échantillon décanté. Dans la méthode par filtration, on utilise sous vide des creusets de Gooch munis d'un filtre Reeve Angel 934AH et d'un préfiltre Millipore AP20.

Particle-size analysis was carried out for some suspended sediment samples having gross weights in the range of 0.15 to 5 g using the Bottom Withdrawal Tube method. The particle-size distribution of the Bottom Withdrawal Tube method ranges from 0.002 to 1.000 mm. The Sieve analysis method may be used for samples with a large amount of material coarser than 0.062 mm.

The particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)
Clay	0.000 24 – 0.004
Silt	0.004 – 0.062
Sand	0.062 – 2.0
Gravel	2.0 – 64.0

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analyzed in distilled water. Chemical dispersion is not used for native-water analysis.

6. *Accuracy and Reliability of Field Data and Computed Results*

The overall accuracy and degree of reliability of the sediment data is dependent upon many factors. Some of the more important of these are:

(a) accuracy and reliability of streamflow records;
(b) regime of the river;
(c) type of sampling equipment used to collect the suspended sediment samples;
(d) frequency of suspended sediment discharge measurements;
(e) frequency of individual sampling;
(f) quality of the relationship between the average suspended sediment concentration in the cross section and the concentration of the individual samples;
(g) frequency and method of bed material sampling;
(h) frequency and method of bed load measurements;
(i) accuracy and reliability of the laboratory analysis;
(j) selected methods of computation of the suspended sediment discharge;
(k) interpretation and extrapolation of sediment records.

An assessment of the quality of the records can be made by an examination of the occurrence of the symbol (S) on the daily mean concentrations.

In general, data collected during open-water periods are more reliable than those collected during periods of ice conditions or those records obtained by estimation. Further, water level data collected utilizing a water-stage recorder are more reliable and accurate than those using a manual gauge only, especially for small or flashy streams.

Une analyse granulométrique a été effectuée pour certains échantillons de sédiments en suspension ayant un poids brut dans l'intervalle de 0.15 à 5 g par la méthode de la burette (extraction des sédiments déposés, à divers intervalles). La distribution de la taille des particules déterminée par cette méthode varie de 0.002 à 1.000 mm. La méthode de tamisage peut être employée pour les échantillons ayant une forte quantité de particules de taille supérieure à 0.062 mm.

La classification granulométrique qui est utilisée dans la présente publication est conforme aux recommandations faites par l'*American Geophysical Union Subcommittee on Sediment Terminology*. La classification est la suivante:

Classification	Taille (mm)
Argile	0.000 24 – 0.004
Limon	0.004 – 0.062
Sable	0.062 – 2.0
Gravier	2.0 – 64.0

La répartition granulométrique qui est fournie dans cette publication, n'est pas obligatoirement représentative de toutes les particules qui sont transportées par un cours d'eau donné. La plupart des matières organiques sont extraites de l'échantillon qui est ensuite soumis à une dispersion mécanique et chimique avant d'être analysé dans de l'eau distillée. La dispersion chimique ne sert pas à l'analyse de l'eau naturelle.

6. *Exactitude des données et des résultats*

L'exactitude des données sur les sédiments dépend de nombreux facteurs. On peut citer, parmi les plus importants:

(a) l'exactitude des données sur les débits;
(b) le régime d'un cours d'eau;
(c) le type d'appareil d'échantillonnage utilisé pour prélever les échantillons de sédiments en suspension;
(d) la fréquence des mesures du débit des sédiments en suspension;
(e) la fréquence des échantillonnages isolés;
(f) la qualité du rapport entre la concentration moyenne des sédiments en suspension dans une section transversale et la concentration des échantillons isolés;
(g) la fréquence des échantillonnages des matériaux de fond et la méthode utilisée;
(h) la fréquence des mesures du charriage de fond et la méthode utilisée;
(i) l'exactitude des analyses de laboratoire;
(j) les méthodes de calcul du débit des sédiments en suspension;
(k) l'interprétation et l'extrapolation des données sur les sédiments.

La qualité des données peut être évaluée d'après la fréquence d'utilisation du symbole (S), avec les données sur la concentration journalière moyenne.

En général, les données recueillies au cours des périodes d'eau libre sont plus sûres que celles qui sont obtenues au cours des périodes de glaces ou par estimation. De plus, les données sur le niveau des eaux qui sont mesurées à l'aide d'un limnigraphe sont plus certaines et plus exactes que celles qui sont mesurées à l'aide d'une jauge manuelle seulement, surtout dans le cas des petits cours d'eau ou des cours d'eau à crues très rapides.

METHOD OF TABULATION OF SEDIMENT DATA

For stations where the suspended sediment load was obtained, the following data are given where available:

1. The table of *Suspended Sediment Load* includes the daily mean discharge in cubic metres per second, the daily mean concentration in milligrams per litre, and the daily suspended sediment load in tonnes per day. The total monthly discharge and total monthly sediment load are also given for each month of record.

   For stations where the sediment load in tonnes per day are produced for complete or partial years, the *Total Suspended Load* for the period is given in the descriptive information.

   For stations where only suspended sediment concentrations are obtained, the table of *Suspended Sediment Load* will not be given.

   Additional descriptive information about the sediment station is also given and will indicate the following, where applicable.

   Location – the latitude and longitude co-ordinates of the location of the gauge are given. For stations where the gauge is located an appreciable distance from the discharge measurement section, these co-ordinates give the location of the discharge measurement section.

   Drainage area – refers to that area enclosed by a topographic divide such that direct surface runoff from precipitation would drain by gravity into the stream upstream from the location of the station.

   Type of Flow – where the flow is known to be natural, this is indicated. The flow of water in many river systems is affected by upstream regulation. In some cases, the extent of this regulation is not known and therefore is not indicated. However, where the regulation is known to be "appreciable", this is indicated as well as the year that the regulation began, if known.

   Type of Gauge – refers to the installation or method used to obtain water level or discharge data:

   (a) Manual – a non-recording type of gauge from which observations of stage normally are obtained once daily.

   (b) Recording – a water-stage recorder from which continuous water levels are obtained on an analog chart. For most International Gauging Stations located in the United States, water level records are obtained utilizing a digital recorder.

   International Gauging Station – on waters adjacent to the international boundary, certain gauging stations have been

PRÉSENTATION DES TABLEAUX DE DONNÉES SUR LES SÉDIMENTS

Pour les stations de mesure du débit des sédiments en suspension, les données suivantes sont présentées, pour autant qu'elles sont disponibles:

1. Le tableau concernant le *débit des sédiments en suspension* (The table of Suspended Sediment Load) donne le débit journalier moyen de l'eau, en mètres cubes par seconde, la concentration journalière moyenne, en milligrammes par litre, et le débit journalier des sédiments en suspension, en tonnes par jour. Chaque mois les données indiquent également les débits mensuels totaux de l'eau et des sédiments.

   Dans le cas des stations où le débit des sédiments, en tonnes par jour, est fourni pour une année complète ou une partie de l'année, le total pour la période est indiqué.

   Dans le cas des stations où seule la concentration des sédiments en suspension est obtenue, ce tableau est absent.

   Des renseignements descriptifs additionnels au sujet de la station sont également présentées. On peut y apporter les précisions suivantes:

   Emplacement (Location) – La latitude et la longitude de la station de jaugeage sont indiquées. Dans les cas où l'équipement de mesure est situé à une bonne distance de la section où le jaugeage est effectué, on indique les coordonnées de cette section.

   Superficie du bassin versant (Drainage area) – Désigne la zone délimitée par une ligne de faîte de sorte que l'écoulement de surface direct provenant des précipitations est entraîné par gravité vers le cours d'eau, en amont de la station.

   Type de débit (Type of Flow) – Un débit reconnu comme naturel est indiqué. Le débit de nombreux réseaux hydrographiques est modifié par une régularisation effectuée en amont. Dans certains cas, l'importance de cette régularisation n'est pas connue, et elle n'est donc pas indiquée. Cependant, quand on sait que la régularisation est d'une certaine importance, on l'indique, ainsi que l'année où elle a débuté (si elle est connue).

   Type de jauge (Type of Gauge) – Il s'agit des jauges ou des méthodes de jaugeage utilisées pour obtenir les données sur le niveau ou le débit d'un cours d'eau.

   (a) *Manuel* (Manual) – Indique qu'un appareil non enregistreur est employé pour obtenir normalement une fois par jour les données sur le niveau et le débit du cours d'eau.

   (b) *Enregistreuse* (Recording) – Indique qu'un limnigraphe permet de mesurer de façon continue le niveau des eaux qui est tracé sur un graphique. La plupart des stations internationales de jaugeage des États-Unis obtiennent les données sur le niveau des eaux à l'aide d'un enregistreur numérique.

   Station internationale de jaugeage (International Gauging Station) – Dans les eaux contiguës aux frontières, on a

designated as "International" and records are approved jointly. Differences between figures published herein and corresponding figures in United States Water Supply Papers are due to variations in automated data processing techniques.

Contributed Data – if data were supplied in their entirety or partially by an outside agency, the name of this co-operating agency is given.

Remarks – contains a statement pertaining to the sediment sample collection.

2. The table of *Instantaneous Suspended Sediment Concentration* for depth-integrating samples includes the following: Date and Time of the sample collection; Water Temperature; Instantaneous Discharge at time of sampling, (if not available the daily mean discharge is given and indicated by a symbol); Single Sampling Vertical location; Dissolved Solids; Percent Sand, Silt and Clay; Type of Sampler used. The particle-size distribution in percent in millimetres and the percent Sand, Silt and Clay, is given where available.

The Single Sampling Vertical Location is defined by many symbols, which are as follows, where applicable:

DIGITS - 5, 14, 130, etc., is the distance in metres from the initial point
WERB - Water's Edge RIGHT Bank
WELB - Water's Edge LEFT Bank
1QRB - One-quarter the distance FROM the RIGHT Bank
3QRB - Three-quarters the distance FROM the RIGHT Bank
1QLB - One-quarter the distance FROM the LEFT Bank
3QLB - Three-quarters the distance FROM the LEFT Bank
MID - MID STREAM
MULT - Composite sediment measurement

For the suspended sediment measurements, the Date; Time; Water Temperature at time of sampling; Discharge computed for each sampling panel; Concentration; Sampling Vertical; Dissolved Solids; Percent Sand, Silt and Clay; Type of Sampler used; and the Particle-size distribution of the Sand, Silt and Clay, in percent is given where available.

3. The table of *Split Vertical Suspended Sediment* for depth-integrating samples includes the following: Date and Time of the sample collection; Water Temperature; Instantaneous Discharge at time of sampling, (if not available the daily mean discharge is given and indicated by a symbol); Sampling Vertical; Depth of Sample (giving the depth sampled from and the depth sampled to); Concentration of Sample, in milligrams per litre, Dissolved solids, in milligrams per litre; and the Particle-size distribution in percent in millimetres and the percent Sand, Silt and Clay are also given.

désigné certaines stations comme «internationales», et les données obtenues sont approuvées par les pays concernés. Les différences entre les chiffres publiés dans la présente publications et dans les *United States Water Supply Papers* sont dues à des variantes dans les techniques de traitement automatique des données.

Données fournies (Contributed Data) – Lorsqu'un organisme extérieur a fourni toutes les données ou une partie des données, son nom est indiqué.

Remarques (Remarks) – Renseignements au sujet du prélèvement des échantillons de sédiments.

2. Le tableau des *concentrations instantanées de sédiments en suspension* (The table of Instantaneous Suspended Sediment Concentration) pour les échantillons obtenus par intégration selon la profondeur comprend: la date et l'heure de prélèvement; la température de l'eau; son débit instantané au moment de l'échantillonnage (s'il n'est pas connu, le débit journalier moyen, avec symbole); l'emplacement de la verticale d'échantillonnage; la concentration des matières dissoutes; les pourcentages de sable, de limon et d'argile; le type d'échantillonneur employé; et la granulométrie du sable, du limon et de l'argile, en pourcentage en millimètres et le pourcentage des particules est donné lorsqu'il est disponible.

Le site vertical d'échantillonnage unique est défini par plusieurs symboles dont les suivants dans certains cas :

CHIFFRE - 5, 14, 130, etc., désigne la distance en mètres à partir du point initial
WERB - Bord de l'eau, rive DROITE
WELB - Bord de l'eau, rive GAUCHE
1QRB - Un quart de la distance À PARTIR de la rive DROITE
3QRB - Trois quarts de la distance À PARTIR de la rive DROITE
1QLB - Un quart de la distance À PARTIR de la rive GAUCHE
3QLB - Trois quarts de la distance À PARTIR de la rive GAUCHE
MID - MI-DÉBIT
MULT - Mesure des sédiments mixtes

Pour les mesures des sédiments en suspension, la date, l'heure, la température de l'eau au moment de l'échantillonnage, le débit calculé pour chaque tranche de la section d'échantillonnage, la concentration et la verticale d'échantillonnage, la concentration des matières dissoutes; les pourcentages de sable, de limon et d'argile; le type d'échantillonneur employé; et la granulométrie du sable, du limon et de l'argile, en pourcentage des particules est donnée lorsqu'elle est disponible.

3. Le tableau des *sédiments en suspension fractionnés pris à la verticale* (The Table of Split Vertical Suspended Sediment) pour les échantillons obtenus par intégration selon la profondeur comprend les éléments suivants : la date et l'heure de l'échantillonnage; la température de l'eau; le débit instantané au moment de l'échantillonnage (s'il n'est pas disponible, on donne le débit moyen quotidien et on l'indique par un symbole), la verticale d'échantillonnage; la profondeur (donner la profondeur à laquelle l'échantillon a été pris); et la profondeur à laquelle l'échantillon a été attributé la concentration des échantillons, en milligrammes par litre; la concentration des matières dissoutes, en milligrammes par litre; la distribution des sédiments de la taille de particules en pourcentage en millimètres; le pourcentage de sable, de limon et d'argile.

4. The table of *Point Integrating Particle-size of Suspended Sediment* includes the following: Date and Time of the sample collection; Water Temperature; Panel Discharge for each sampling vertical; Sampling Vertical; Depth of Sample; Concentration of Sample, in milligrams per litre; Dissolved Solids in milligrams per litre, and the Particle-size distribution in percent in millimetres and the percent Sand, Silt and Clay are also given.

5. The table of *Bed Load Particle-size* includes the following: Date and Time of the sample collection; Panel Discharge; Sampling Vertical and the Type of Sampler used in the collection of the sample and the Particle-size distribution, in percent in millimetres, for each sample of bed load collected.

6. The table of *Bed Material Particle-size* includes the following: Date and Time of the sample collection; Panel Discharge; Sampling Vertical and the Type of Sampler used in the collection of the sample and the Particle-size distribution, in percent in millimetres, for each sample of bed material collected.

7. The table of *Historical Sediment Data Summary* gives the following, for the period of record, where applicable.

   (a) Record Summary
   (b) Type of Sampling
   (c) Sampled Concentration, maximum and minimum
   (d) Suspended Sediment Load, maximum daily and the total, for the period, in tonnes
   (e) Summary, including mean load, the historical mean load and the standard error of the mean in percent.

(a) The *Record Summary* gives the months of record that data are available. If the complete month is on file the symbol (C) is shown, while partial months of data are indicated by the symbol (P). Months with no data on file are indicated by (-).

(b) The *Type of Sampling* indicates the type of sampling method used to collect the sediment samples during the period of operation. If the samples were collected by manual methods this is indicated by "MANUAL." If the samples were collected by a pump sampler or some other automatic method this is indicated by "AUTO." If both manual and automatic sampling methods were used this is indicated by "DUAL."

(c) The *Sampled Concentration* gives the maximum and minimum concentration, in milligrams per litre, and the date of collection for each year of record. The extreme recorded for the period of record is indicated by an asterisk (*). If more than one maximum or minimum, of the same value, occurred during the year only the date of the first occurrence is identified by the asterisk.

(d) The *Suspended Sediment Load* gives the maximum daily load, in tonnes, and the date of occurrence. The extreme recorded is indicated by an asterisk (*). The Total for the Period gives

4. Le tableau de la *granulométrie des échantillons ponctuels et intégrés des sédiments en suspension* (The table of Point Integrating Particle-size of Suspended Sediment) comprend: la date et l'heure de prélèvement de l'échantillon, la température de l'eau, le débit de la tranche de la section pour chaque verticale d'échantillonnage, la verticale d'échantillonnage, la profondeur de l'échantillon, la concentration des échantillons, en milligrammes par litre, la concentration des matières dissoutes, en milligrammes par litre, et granulométrie en millimètres et en pourcentage du sable, du limon et de l'argile.

5. Le tableau de la *granulométrie des sédiments charriés* (The table of Bed Load Particle-size) comprend: la date et l'heure de prélèvement de l'échantillon, le débit de la tranche de la section, la verticale d'échantillonnage et le type d'échantillonneur employé et le pourcentage en millimètres des particules pour chaque échantillon recueilli du charriage.

6. Le tableau de la *granulométrie des matériaux du lit* (The table of Bed Material Particle-size) comprend: la date et l'heure de prélèvement de l'échantillon, le débit de la tranche de la section, la verticale d'échantillonnage et le type d'échantillonneur employé et le pourcentage en millimètres des particules pour chaque échantillon recueilli.

7. Le tableau du *sommaire chronologique des données sur les sédiments* (The table of Historical Sediment Data Summary) donne, pour la période pour laquelle les données sont disponibles, les renseignements suivants lorsque de telles données existent:

   (a) Le sommaire du relevé
   (b) Le type d'échantillonnage
   (c) Les concentrations mesurées, maximum et minimum
   (d) Le débit des sédiments en suspension, maximum quotidien et le total pour la période en tonnes
   (e) Résumé, comprend le débit moyen, le débit moyen chronologique et l'erreur type de la moyenne en pourcentage.

(a) Le *sommaire du relevé* donne les mois de relevé pour lesquels les données sont disponibles. Le symbole (C) indique que les données sont disponibles pour tout le mois. Le symbole (P) indique que ces données ne sont disponibles que pour une partie du mois. Enfin, on indique par (-) les mois qui n'ont pas de données.

(b) Le *type d'échantillonnage* indique le type de méthode d'échantillonnage que l'on utilise dans le prélèvement des échantillons de sédiments pendant la période d'exploitation. Si le prélèvement des échantillons se fait par des méthodes manuelles, on indique «MANUEL». Si le prélèvement des échantillons se fait au moyen d'échantillonneur à pompe ou par quelque autre méthode automatique, on indique «AUTO». Si on utilise à la fois des méthodes d'échantillonnage manuelles et automatiques, on indique «DOUBLE».

(c) Pour les *concentrations mesurées* (Sampled Concentration), on donne la concentration maximale et la concentration minimale, en milligrammes par litre, et leur date d'obtention pour chaque année de relevé. La valeur extrême enregistrée est indiquée par un astérisque (*). Si la valeur du maximum ou du minimum a été mesurée plus d'une fois pendant l'année, on signale, par l'astérisque, seulement la date de la première mesure.

(d) Sous le *débit des sédiments en suspension* (Suspended Sediment Load), on donne le débit journalier maximal, en tonnes, et sa date de mesure. Le débit extrême enregistré est indiqué

the total load for the period or year, in tonnes. The extreme recorded is also indicated by an asterisk (*). If more than one maximum or minimum, of the same value, occurred during the year only the date of the first occurrence is identified by the asterisk. A load which has been revised since the previous publication is marked with the symbol (R) for Revision.

(e) The *Summary* gives the *Mean Load* and the *Historical Mean Load* in tonnes.

The *Standard Error of the Mean* % is calculated using the following equations:

$$SEM = \frac{S}{\bar{x}\sqrt{n}} \times 100\%$$

and

$$S = \sqrt{\frac{\Sigma (x - \bar{x})^2}{n - 1}}$$

where SEM is the Standard Error of the Mean.

S is the Standard Deviation of the annual mean loads.

x is the annual Mean Load variable.

$\bar{x}$ is the Historical Mean Load or the arithmetic mean of the annual Mean Loads.

n is the number of years for which there is an annual Mean Load.

For stations with only instantaneous samples, this table will not include the *Suspended Sediment Load* or the statistical information in the *Summary*.

DEFINITION OF TERMS

The following definitions are given to clarify the terms used in this publication:

Automatic pump sample is an individual water-sediment mixture pumped from a fixed point in a stream.

Bed load is that material moving in almost continuous contact with the streambed, being rolled or pushed along the bottom by the force of the water.

Bed material is the sediment mixture of which the streambed is composed.

Daily load is the suspended sediment load expressed in tonnes for a particular day. The daily load is obtained by multiplying the daily mean sediment concentration (mg/L) by the daily mean discharge (m^3/s) and the conversion factor, 0.0864.

Daily mean concentration is a time-weighted mean value and is computed from a manually constructed concentration curve. The mean concentration value may be determined arithmetically or graphically. The arithmetic mean is obtained either by (1) selecting values from the concentration graph that represents uniform intervals of time and taking the arithmetic average or by (2) selecting values from the graph that represent unequal intervals of time and weighing these values by the

par un astérisque (*). Le débit total pour la période ou pour l'année est indiqué. La valeur extrême est également signalée par un astérisque (*). Si la valeur du maximum ou du minimum a été mesurée plus d'une fois pendant l'année, on signale, par l'astérisque, seulement la date de la première mesure. La lettre R indique qu'une valeur du débit a été révisée depuis la dernière publication.

(e) Le *résumé* donne le *débit moyen* et le *débit moyen chronologique*, en tonnes.

L'*erreur-type de la moyenne* % (Standard Error of the Mean), est calculée à l'aide des équations suivantes:

$$SEM = \frac{S}{\bar{x}\sqrt{n}} \times 100\%$$

et

$$S = \sqrt{\frac{\Sigma (x - \bar{x})^2}{n - 1}}$$

où SEM est l'erreur type de la moyenne.

S est l'écart type des débits moyens annuels.

x est la variable du débit moyen annuel.

$\bar{x}$ est le débit moyen chronologique ou la moyenne arithmétique des débits moyens annuels.

n est le nombre d'années où il y a un débit moyen annuel.

Dans le cas des stations ne prélevant que des échantillons instantanés, ce tableau ne donnera pas le *débit des sédiments en suspension* ni les données statistiques du *résumé*.

DÉFINITION DES TERMES

Les définitions suivantes sont présentées afin de faciliter la compréhension des termes utilisés dans la présente publication:

Échantillonnage automatique à l'aide d'une pompe (Automatic pump sample): Prélèvement d'un mélange de sédiments et d'eau au moyen d'une pompe fonctionnant automatiquement, en un point précis d'un cours d'eau.

Charriage (Bed load): Matières roulées ou poussées sur le fond sous l'action de l'eau, mais restant en contact presque permanent avec le fond.

Matériau du lit (Bed material): Mélange de sédiments composant le lit d'un cours d'eau.

Débit journalier des sédiments en suspension (Daily load): Débit des sédiments en suspension exprimé en tonnes par jour, pour une journée donnée. On l'obtient en multipliant la concentration journalière moyenne des sédiments (mg/L) par le débit journalier moyen de l'eau (m^3/s) et le facteur de conversion 0.0864.

Concentration journalière moyenne (Daily mean concentration): Moyenne pondérée en fonction du temps, calculée à partir d'une courbe de la concentration établie manuellement. La valeur de la concentration moyenne peut être déterminée arithmétiquement ou graphiquement. Pour la déterminer arithmétiquement, on peut, soit choisir sur la courbe des valeurs représentant des intervalles uniformes de temps et faire la moyenne arithmétique, soit choisir sur cette courbe

time intervals represented by the concentrations. For graphical explanation refer to *Office Procedures for Sediment Data Computations* and for the automated graphical explanation refer to *Automated Hydrometric Computation Procedures*.

Depth-integrated sediment sample is a suspended sediment sample collected at a single vertical in a cross section in a sampler moving vertically at a constant transit rate and represents an average sample for that part of the depth ranging from the water surface to about nine centimetres above the streambed.

Instantaneous suspended sediment sample is a sample collected at a fixed vertical in a river cross section.

Measured suspended sediment discharge is the suspended sediment discharge that can be computed from stream discharge and the concentration of sediment determined from depth-integrated sediment samples.

Particle-size analysis is the process of determining the size distribution of particles in a sediment sample.

Point-integrated sediment sample is a sample of the water-sediment mixture taken over a specified period of time at a fixed point and depth in a river cross section.

Sediment is fragmental material which has been deposited, eroded or transported by a flowing stream.

Sediment hydrograph is a graph showing the variation of suspended sediment concentration or sediment discharge with respect to time.

Single sample is a sample taken at a selected permanent vertical in a cross section. Two bottles of water-sediment mixture make up each single sample.

Single sampling vertical is a selected permanent vertical in a cross section in which single suspended sediment samples are collected.

Suspended sediment is sediment that moves in suspension in water either as a colloid or through the influence of the upward component of turbulent currents.

Suspended sediment concentration is the ratio of the weight of dry solids in a water-sediment mixture to the volume of the mixture. The units of this ratio are "milligrams per litre" (mg/L).

Suspended sediment load is the quantity of suspended sediment transported through a cross section per unit of time.

des valeurs qui représentent des intervalles inégaux de temps et pondérer ces valeurs en fonction des intervalles de temps correspondants. En ce qui concerne les méthodes graphiques, consulter *Méthodes de bureau pour les calculs de données sur les sédiments* et, pour la méthode automatisée, *Automated Hydrometric Computation Procedures*.

Échantillon intégré sur toute la profondeur (Depth integrated sediment sample): Échantillon des sédiments en suspension prélevé sur une verticale précise d'une section transversale d'un cours d'eau à l'aide d'un échantillonneur se déplaçant verticalement à une vitesse constante; il représente un échantillon moyen des matières en suspension entre la surface de l'eau et environ 9 cm du fond.

Échantillon instantané de sédiments en suspension (Instantaneous suspended sediment sample): Échantillon prélevé à une verticale précise d'une section transversale d'un cours d'eau.

Débit mesuré des sédiments en suspension (Measured suspended sediment discharge): Débit des sédiments en suspension qui peut être calculé à partir du débit du cours d'eau et de la concentration des sédiments déterminée à partir d'échantillons intégrés sur toute la profondeur.

Analyse granulométrique (Particle-size analysis): Détermination de la répartition de la taille des particules dans un échantillon de sédiments.

Échantillon ponctuel et intégré (Point-integrated sediment sample): Échantillon constitué d'un mélange d'eau et de sédiments, prélevé au cours d'une période de temps donnée en un point précis d'une section transversale d'un cours d'eau et à une profondeur donnée.

Sédiments (Sediment): Matières fragmentaires qui ont été déposées, érodées ou transportées par un cours d'eau.

Hydrogramme des sédiments (Sediment hydrograph): Graphique représentant la variation de la concentration des sédiments en suspension ou du débit des sédiments en fonction du temps.

Échantillon unique (Single sample): Échantillon prélevé sur une verticale permanente particulière dans une section transversale. Deux bouteilles du mélange eau-sédiments constituent un seul échantillon.

Verticale d'échantillonnage unique (Single sampling vertical): Verticale permanente d'une section transversale où des échantillons uniques de sédiments en suspension sont prélevés.

Sédiments en suspension (Suspended sediment): Matériaux qui se déplacent au sein de l'eau, soit sous forme colloïdale, soit sous l'influence des forces ascendantes des courants turbulents.

Concentration des sédiments en suspension (Suspended sediment concentration): Rapport entre le poids des matières solides sèches contenues dans un mélange eau-sédiments et le volume du mélange. Les unités employées sont les «milligrammes par litre» (mg/L).

Débit des sédiments en suspension (Suspended sediment load): Quantité de sédiments en suspension transportés par unité de temps à travers une section transversale d'un cours d'eau.

Total sediment load is the sum of the suspended sediment load and the bed load.

Unmeasured sediment load is the difference between total sediment load and measured suspended sediment load.

DEFINITION OF SYMBOLS

Symbols are located at the bottom of the data sets under the headings Time, Discharge, Concentration, and Dissolved Solids. The symbols with their definitions are listed below.

Time Symbol

E – *Estimated* – indicates estimated data. It indicates that the time of sample collection is estimated by some indirect method or comparison with other stream data.

Discharge Symbol(s)

A – *Manual Gauge* – indicates that one or more manual gauge observations per day were obtained and used as the mean for the day for a gauging station equipped with a recording gauge. This symbol is used during open-water periods only.

B – *Ice Conditions* – indicates the presence of ice at the gauging station. For gauging stations where discharge data are obtained, this symbol indicates that the presence of ice has affected the stage-discharge relationship.

E – *Estimated* – indicates estimated data. It indicates that the values recorded are estimated by some indirect method such as interpolation, extrapolation, comparison with other streams or by comparison with meteorological data.

H – *Daily Mean Discharge* – is the mean discharge for a particular day, usually referred to as the "daily mean discharge".

V – *Daily Mean; Manual Gauge* – is the mean discharge for a particular day and indicates that one or more manual gauge observations per day were obtained and used as the mean for the day.

W – *Daily Mean; Ice Conditions* – is the mean discharge for a particular day and indicates that the presence of ice has affected the stage-discharge relationship.

Y – *Daily Mean; Estimated* – is the mean discharge for a particular day and indicates that the value has been estimated by some indirect method.

Concentration Symbol(s)

C – *Coarse Material Present* – indicates that during the laboratory analysis coarse material (sand) was observed in the sediment sample.

Débit total des sédiments (Total sediment load): Somme du débit des sédiments en suspension et du débit charrié.

Débit non mesuré des sédiments (Unmeasured sediment load): Différence entre le débit total des sédiments et le débit mesuré des sédiments en suspension.

DÉFINITION DES SYMBOLES

Les symboles figurent au bas des séries de données et sont traités sous les rubriques Temps, Débit, Concentration, Matières solides en solution. Ces symboles avec leurs définitions sont donnés dans la liste ci-après.

Symbole du temps :

E – *Estimative* – Indique des données estimatives, c'est-à-dire que l'heure de prélèvement de l'échantillon est évaluée de façon indirecte ou par comparaison avec d'autres données sur les cours d'eau.

Symbole(s) du débit :

A – *Turbidisonde simple* – Indique qu'on a effectué à une station de jaugeage dotée d'une turbidisonde enregistreuse au moins une observation par jour à l'aide d'une turbidisonde simple et qu'on s'en est servi comme moyenne pour la journée en question. Le symbole n'est employé qu'au cours des périodes d'eau libre.

B – *Glaces* – Indique la présence de glaces à la station de jaugeage, qui ont faussé la relation hauteur-débit.

E – *Estimative* – Indique des données estimatives, c'est-à-dire que les valeurs enregistrées sont évaluées de façon indirecte, par exemple par interpolation, extrapolation, ou par comparaison avec d'autres cours d'eau ou avec des données météorologiques.

H – *Débit journalier moyen* – Débit moyen pour une journée donnée, ordinairement appelé «débit journalier moyen».

V – *Débit journalier moyen; turbidisonde simple* – Débit moyen pour une journée donnée; indique qu'on a effectué au moins une observation par jour et qu'on s'en est servi comme moyenne pour la journée en question.

W – *Débit journalier moyen; glaces* – Débit moyen pour une journée donnée; indique que la présence de glaces a faussé la relation hauteur-débit.

Y – *Débit journalier moyen; estimative* – Débit moyen pour une journée donnée; indique que la valeur a été évaluée de façon indirecte.

Symbole(s) de la concentration :

C – *Sable grossier présent* – Indique qu'au cours de l'analyse en laboratoire on a observé du sable grossier dans un échantillon de sédiments.

F – Sample Bottle Filled – indicates that during the laboratory analysis it was observed that the sample bottle had been filled to capacity.

G – Organic Material Present – indicates that during the laboratory analysis it was observed that organic material was collected in the sample bottle.

Single Vertical Symbol(s)

K – Sampling vertical not at the regular single vertical from LEFT bank – indicates that a sample was collected at a location from the left bank, in a cross-section, which is not at the regular single vertical.

L – Sediment measurement vertical not at the regular measurement cross-section from LEFT bank – indicates that the measurement sampling verticals were established from the left bank, in a cross-section which is not the regular measurement cross-section.

M – Sediment measurement vertical – indicates that the sampling vertical is one of several, usually five, and represents a panel width. The instantaneous discharge represents the flow for a panel width.

X – Sampling vertical not at the regular single vertical – indicates that a sample was collected at a location, in a cross-section, which is not at the regular single vertical. The location of the regular single vertical is given at the bottom of the Instantaneous Suspended Sediment data.

Z – Sediment measurement vertical not at the regular measurement cross-section – indicates that a suspended sediment measurement was collected in a cross-section which is not the regular measurement corss-section.

Note: If no symbol is present the samples have then been collected at the regular Single Vertical.

F – Flacon d'échantillonnage rempli – Indique qu'au cours de l'analyse en laboratoire on a observé que le flacon d'échantillonnage avait été complètement rempli.

G – Substance organique présente – Indique qu'au cours de l'analyse en laboratoire on a observé qu'une substance organique a été prélevée dans le flacon d'échantillonnage.

Symbole(s) de la verticale unique :

K – Verticale d'échantillonnage à l'extérieur de la verticale unique habituelle à partir de la rive GAUCHE – Indique qu'un échantillon a été prélevé à un endroit à partir de la rive gauche, dans une section transversale, mais à l'extérieur de la verticale unique habituelle.

L – Verticale de mesure des sédiments, à l'extérieur de la section transversale de mesure habituelle à partir de la rive GAUCHE – Indique que les verticales de mesure d'échantillonnage ont été établies à partir de la rive gauche, dans un section transversale à l'extérieur de la section transversale de mesure habituelle.

M – Verticale de mesure des sédiments – Indique que la verticale d'échantillonnage est l'une de plusieurs verticales, en général cinq, et qu'elle représente la dimension d'une tranche. Le débit instantané représente le débit relatif à la dimension d'une tranche.

X – Verticale d'échantillonnage à l'extérieur de la verticale unique habituelle – Indique qu'un échantillon a été prélevé à un endroit, dans une section transversale, mais à l'extérieur de la verticale unique habituelle. L'endroit de la verticale unique habituelle est donné à la fin des données sur les sédiments en suspension instantanés.

Z – Verticale de mesure des sédiments, à l'extérieur de la section transversale de mesure habituelle – Indique qu'une mesure de sédiments en suspension a été prise dans une section transversale à l'extérieur de la section transversale de mesure habituelle.

Note : S'il n'y a pas de symbole, cela indique que les échantillons ont été prélevés à la verticale unique habituelle.

EQUIVALENTS OF MEASURE

The following list of convenient equivalents of measure includes the relationship between imperial units and the International System of Units (SI).

1 inch equals 2.54 cm (centimetres)
1 foot equals 0.3048 m (metre)
1 statute mile equals 1.6093 km (kilometres)

1 cm (centimetre) equals 0.393 70 inch
1 m (metre) equals 3.2808 feet
1 km (kilometre) equals 0.621 37 mile

1 acre equals 43 560 square feet
1 acre equals 0.404 69 ha (hectare)
1 square mile equals 640 acres
1 square mile equals 2.5900 km^2 (square kilometres)
1 square mile equals 259.0 ha (hectares)

1 ha (hectare) equals 10 000 m^2 (square metres)
1 ha (hectare) equals 2.4710 acres
1 km^2 (square kilometre) equals 0.386 10 square mile

1 cubic foot equals 6.2288 imperial gallons
1 imperial gallon equals 4.546 09 L (litres)
1 imperial gallon equals 1.2010 U.S. gallons
1 U.S. gallon equals 0.133 68 cubic foot
1 cubic foot equals 0.028 317 m^3 (cubic metre)
1 m^3 (cubic metre) equals 35.315 cubic feet
1 dam^3 (cubic decametre) equals 1000 m^3 (cubic metres)
1 dam^3 (cubic decametre) equals 1 mm (millimetre) over 1 km^2 (square kilometre)

1 cubic foot per second for one day equals 1.9835 acre-feet
1 cubic foot per second for one day covers one square mile to a depth of 0.037 19 inch
1 acre-foot equals 1.2335 dam^3 (cubic decametres)
1 m^3/s (cubic metre per second) for one day equals 86.4 dam^3 (cubic decametre)
1 m^3/s (cubic metre per second) for one day covers one square kilometre to a depth of 0.0864 m (metre)

1 foot per second equals 0.6818 mile per hour
1 mile per hour equals 1.467 feet per second
1 m/s (metre per second) equals 3.6 km/h (kilometre per hour)
1 km/h (kilometre per hour) equals 0.2778 m/s (metre per second)

1 cubic foot per second equals 0.028 317 m^3/s (cubic metre per second)
1 m^3/s (cubic metre per second) equals 35.315 cubic feet per second

1 pound equals 0.453 59 kg (kilogram)
1 kg (kilogram) equals 2.2046 pounds

1 short ton (2000 pounds) equals 0.907 18 t (tonne)
1 t (tonne) equals 2204.6 pounds

degrees Celsius = 5/9 (degrees Fahrenheit - 32)
degrees Fahrenheit = 9/5 (degrees Celsius) + 32

ÉQUIVALENCES DES UNITÉS DE MESURE

Voici une liste des unités de mesure impériales et leurs équivalences dans le Système international d'unités (SI).

1 pouce vaut 2.54 cm (centimètres)
1 pied vaut 0.3048 m (mètre)
1 mille terrestre vaut 1.6093 km (kilomètre)

1 cm (centimètre) vaut 0.393 70 pouce
1 m (mètre) vaut 3.2808 pieds
1 km (kilomètre) vaut 0.621 37 mille

1 acre vaut 43 560 pieds carrés
1 acre vaut 0.404 69 ha (hectare)
1 mille carré vaut 640 acres
1 mille carré vaut 2.5900 km^2 (kilomètres carrés)
1 mille carré vaut 259.0 ha (hectares)

1 ha (hectare) vaut 10 000 m^2 (mètres carrés)
1 ha (hectare) vaut 2.4710 acres
1 km^2 (kilomètre carré) vaut 0.386 10 mille carré

1 pied cube vaut 6.2288 gallons impérials
1 gallon impérial vaut 4.546 09 L (litres)
1 gallon impérial vaut 1.2010 gallon américain
1 gallon américain vaut 0.133 68 pied cube
1 pied cube vaut 0.028 317 m^3 (mètre cube)
1 m^3 (mètre cube) vaut 35.315 pieds cubes
1 dam^3 (décamètre cube) vaut 1000 m^3 (mètres cubes)
1 dam^3 (décamètre cube) vaut 1 mm (millimètre) qui couvre 1 km^2 (kilomètre carré)

1 pied cube par seconde pendant un jour vaut 1.9835 acre-pied
1 pied cube par seconde pendant un jour couvre un volume d'un mille carré par 0.037 19 pouce
1 acre-pied vaut 1.2335 dam^3 (décamètre cube)
1 m^3/s (mètre cube par seconde) pour un jour vaut 86.4 dam^3 (décamètres cubes)
1 m^3/s (mètre cube par seconde) pour un jour couvre un kilomètre carré à une profondeur de 0.0864 m (mètre)

1 pied par seconde vaut 0.6818 mille par heure
1 mille par heure vaut 1.467 pied par seconde
1 m/s (mètre par seconde) vaut 3.6 km/h (kilomètres par heure)
1 km/h (kilomètre par heure) vaut 0.2778 m/s (mètre par seconde)

1 pied cube par seconde vaut 0.028 317 m^3/s (mètre cube par seconde)
1 m^3/s (mètre cube par seconde) vaut 35.315 pieds cubes par seconde

1 livre vaut 0.453 59 kg (kilogramme)
1 kg (kilogramme) vaut 2.2046 livres

1 tonne courte (2000 livres) vaut 0.907 18 t (tonne)
1 t (tonne) vaut 2204.6 livres

degrés Celsius = 5/9 (degrés Fahrenheit - 32)
degrés Fahrenheit = 9/5 (degrés Celsius) + 32

CO-OPERATION AND ACKNOWLEDGMENTS

Co-operative undertakings with other agencies form an important part of the activities of the Water Survey of Canada. Close co-operation has been maintained with public agencies and private organizations concerned with water resources. Data have been mutually exchanged and suspended sediment collection operations have been facilitated by the assistance received from a number of organizations.

On waters adjacent to the International Boundary, certain sediment stations are maintained by Canada (or the United States) under agreement with the United States (or Canada) and the records are collected and compiled in a manner equally acceptable to both countries. These stations are designated as "International Gauging Stations" in this publication.

For the valuable assistance and co-operation received in obtaining sediment survey records, the Water Survey of Canada is indebted to other federal and provincial organizations which are noted as contributing agencies in the summary for the year. A list of these agencies may be found in the *Sediment Data Reference Index*.

COOPÉRATION ET REMERCIEMENTS

Le travail entrepris en coopération avec d'autres organismes représente une partie importante des activités de la Division des relevés hydrologiques du Canada. On a maintenu une étroite collaboration avec les organismes, publics ou privés, qui s'intéressent aux ressources en eau. On a échangé des données sur les sédiments, et l'assistance fournie par certains organismes a facilité les opérations d'échantillonnage des sédiments en suspension.

Dans les eaux adjacentes à la frontière internationale, les stations dépendent du Canada ou des États-Unis selon l'accord intervenu entre les deux pays, et les relevés sont faits et compilés de façon à satisfaire les deux pays. Ces stations sont nommées «Stations internationales de jaugeage» dans la présente publication.

La Division des relevés hydrologiques du Canada est redevable à plusieurs organismes fédéraux et provinciaux, dont les noms apparaissent dans le sommaire de l'année, de l'aide et de la collaboration qu'ils lui ont apportées pour l'obtention des données sur les sédiments. On trouvera également les noms des organismes qui ont fourni des données dans l'*Index de référence des données sur les sédiments*.

REVISIONS

A number of corrections or revisions have been made to previously published data. Many of these were required because of typographical or computational errors which were exposed when the data were stored on magnetic tape and monthly means were re-calculated by computer. Other errors were discovered or different interpretations of basic data were made during the systematic review of historical streamflow data.

Revisions to daily discharges or sediment data are not published at present. However, those stations where a systematic review has been conducted are identified in the Surface Water Data Reference Index publication. The Historical Streamflow Summary publications contain revisions to monthly and annual mean discharges, and annual extremes of discharge. Revisions, corrections or additions made to discharges and sediment after January 1, 1980, are indicated by an "R" symbol in the data summaries. Detailed information on revisions to historical data is available from the appropriate Regional Chief.

RÉVISIONS

On a corrigé ou révisé des données déjà publiées. Il a été nécessaire d'effectuer plusieurs corrections, car on a relevé des erreurs typographiques ou de calcul lorsqu'on a enregistré les données sur rubans magnétiques et qu'on a recalculé les moyennes mensuelles à l'aide d'un ordinateur. On a aussi relevé d'autres erreurs ou fait des interprétations différentes de certaines données de base au cours de la révision systématique des données historiques sur le débit.

Les corrections apportées aux débits journaliers ou aux données sur les sédiments ne sont pas publiées, du moins pour le moment. Cependant, les stations où on a effectué une révision systématique sont indiquées dans l'*Index de référence des données sur les eaux de surface*. Les publications intitulées *Sommaire chronologique de l'écoulement* contiennent des données révisées sur les débits mensuels et annuels moyens et les extrêmes annuels du débit. Les révisions, corrections ou ajouts apportés aux données sur les débits et sur les sédiments après le 1er janvier 1980 sont indiqués par la lettre R dans les résumés des données. On peut obtenir plus de détails sur les révisions en s'adressant au chef régional concerné.

ALBERTA

ALKALI CREEK NEAR THE MOUTH - STATION NO. 05CK005

LOCATION: LAT 50 53 54 N LONG 110 30 30 W
DRAINAGE AREA: 590 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	119 MAY 10 *	119 MAY 10 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

ATHABASCA RIVER AT EMBARRAS AIRPORT - STATION NO. 07DD001

LOCATION: LAT 58 12 18 N LONG 111 23 24 W
DRAINAGE AREA: 155 000 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE VERTICAL SAMPLING (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUL 05	12:30	17.0		380	L	D49	191	159	16	27	42	54	71	83	94	99	100			17	56	27
JUL 05	12:35	17.0		320	L	D49	238	164	23	31	47	56	72	83	95	99	100			17	52	31
JUL 05	12:40	17.0		240	L	D49	300	160	21	26	41	46	60	72	92	100				28	46	26
JUL 05	12:45	17.0		120	L	D49	294	165	24	28	43	49	64	74	88	99	100			26	46	28
JUL 05	12:50	17.0		60.0	L	D49	267	162	21	31	46	53	68	79	88	98	100			21	48	31
JUL 05	14:00	17.0		MID		D49	216	164	24	33	48	56	66	74	79	92	99	100		26	41	33
JUL 05	14:25	17.0		MID		D49	324	163	18	22	30	41	52	62	81	98	100			38	40	22

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

VERTICAL SYMBOL(S): L - A SEDIMENT MEASUREMENT VERTICAL NOT AT THE REGULAR CROSS SECTION, FROM LEFT BANK

ATHABASCA RIVER AT EMBARRAS AIRPORT - STATION NO. 07DD001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-OCT MEAN LOAD (TONNES)	SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-OCT STANDARD ERROR OF MEAN %
1971	----PPPPP--P	MANUAL	1 490 JUN 14	4 DEC 8 *	--- ---	---	---	---	---
1972	---PP-P-----	MANUAL	355 MAY 18	13 APR 13	--- ---	---	---	---	---
1973	----PPP-P---	MANUAL	1 420 JUN 22	106 SEP 25	--- ---	---	---	---	---
1974	-----PPCC---	MANUAL	922 JUL 19	82 SEP 30	228 000 JUL 19	2 860 000	---	---	---
1976	----CCCCCC--	MANUAL	613 AUG 30	15 OCT 27	98 100 SEP 1	3 400 000	18 500	18 500	---
1977	---PCCCCCC--	MANUAL	1 180 JUN 5	16 OCT 31	292 000 JUN 5	5 640 000	30 200	24 400	24.1
1978	----CCCCCC--	MANUAL	692 JUN 23	8 NOV 30	120 000 JUN 23	4 430 000	23 800	24 200	14.0
1979	----PCCCCCP-	MANUAL	868 JUN 22	10 NOV 3	172 000 JUN 20	4 460 000	---	---	---
1980	---PCCCCCP-	MANUAL	2 340 JUN 8	18 NOV 2	739 000 JUN 10 *	7 050 000 *	38 100	27 700	15.3
1981	----CCCCC---	MANUAL	252 MAY 1	36 JUL 26	30 700 JUN 10	1 130 000	---	---	---
1982	----CCCCCC--	MANUAL	2 770 JUL 9 *	15 OCT 31	605 000 JUL 10	6 960 000	37 900	29 700	13.0
1983	----CCCCCP-	MANUAL	648 JUL 1	7 NOV 1	98 300 JUL 1	2 150 000	11 700	26 700	16.3
1984	---PPCCCCC--	MANUAL	1 600 JUN 5	27 APR 28	283 000 JUN 5	4 590 000	---	---	---
1985	----PPPPPP--	MANUAL	1 410 MAY 5	19 SEP 9	--- ---	---	---	---	---
1989	----PP-PP---	MANUAL	659 AUG 9	86 SEP 19	--- ---	---	---	---	---
1990	------P-----	MANUAL	324 JUL 5	191 JUL 5	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

ALBERTA

ATHABASCA RIVER AT MCMURRAY - STATION NO. 07CC002

LOCATION: LAT 56 44 00 N LONG 111 22 30 W
DRAINAGE AREA: 100 000 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 06	12:50	5.0	879	E MID	X D49	266	170														

NOTE: SINGLE VERTICAL IS LOCATED AT 220 METRES FOR 1990

DISCHARGE SYMBOL(S): E - ESTIMATED
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

ATHABASCA RIVER AT MCMURRAY - STATION NO. 07CC002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1966	--------P---	MANUAL	20 SEP 28		20 SEP 28		---	---	---	---	---	---
1973	PP-PCCCCCC--	MANUAL	4 040 JUN 17		14 FEB 26		---	---	---	---	---	---
1974	CCCCCCCCCC--	MANUAL	1 440 APR 29		15 OCT 31		---	---	---	---	---	---
1975	P-PPCCCCCP--	MANUAL	1 680 JUL 1		7 MAR 15		---	---	---	---	---	---
1976	CCCCCCCCCC--	MANUAL	1 530 AUG 22		6 JAN 14		---	---	---	---	---	---
1977	---CCCCCCC--	MANUAL	2 090 JUN 2		16 OCT 30		---	---	---	---	---	---
1978	CCCCCCCCCCCC	MANUAL	1 720 JUL 16		5 JAN 31		---	---	---	---	---	---
1979	--CCCCCCCCP-	MANUAL	1 820 JUN 18		5 MAR 1		---	---	---	---	---	---
1980	----PCCCCC--	MANUAL	1 570 JUN 9		10 OCT 31		---	---	---	---	---	---
1981	----PCCCC---	MANUAL	599 JUN 7		10 SEP 30		---	---	---	---	---	---
1982	----PCCCC---	MANUAL	3 710 JUL 8		50 SEP 6		---	---	---	---	---	---
1983	----PCCCP---	MANUAL	1 810 JUL 23		16 AUG 23		---	---	---	---	---	---
1984	---PCCCC----	MANUAL	649 MAY 24		20 AUG 31		---	---	---	---	---	---
1985	----CCCCP---	MANUAL	827 JUL 8		0 AUG 2	*	---	---	---	---	---	---
1986	---PCCCCCC--	MANUAL	4 110 JUL 20	*	12 OCT 31		---	---	---	---	---	---
1987	---CCCC-----	MANUAL	579 JUN 12		13 APR 1		---	---	---	---	---	---
1988	---PCCCCCC--	MANUAL	289 MAY 1		1 SEP 27		---	---	---	---	---	---
1989	----PP-PP---	MANUAL	1 830 AUG 8		69 SEP 18		---	---	---	---	---	---
1990	----P-------	MANUAL	266 MAY 6		266 MAY 6		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ATHABASCA RIVER BELOW MCMURRAY - STATION NO. 07DA001

LOCATION: LAT 56 46 50 N LONG 111 24 00 W
DRAINAGE AREA: 133 000 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1967	-----PP-PPP-P	MANUAL	405 MAY 11		6 DEC 12		---	---	---	---	---	---
1968	PPPPPPPPPP-P	MANUAL	268 MAY 2		5 MAR 21		---	---	---	---	---	---
1969	CCC-CCCCCC--	MANUAL	3 650 AUG 11		1 JAN 1	*	845 000	AUG 11	5 480 000	---	---	---
1970	CCCCCCCCCCCC	MANUAL	4 950 JUN 30	*	3 JAN 26		1 520 000	JUL 2 *	12 200 000	33 500	33 500	---
1971	CCCCCCCCCCCC	MANUAL	2 480 JUL 15		3 JAN 1		975 000	JUL 15	14 500 000 *	39 800	36 600	8.6
1972	CCCCCCCCCCCC	MANUAL	2 440 JUN 30		3 JAN 11		732 000	JUN 30	9 920 000	27 100	33 500	10.9

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ATHABASCA RIVER NEAR WINDFALL - STATION NO. 07AE001

LOCATION: LAT 54 12 25 N LONG 116 03 45 W
DRAINAGE AREA: 19 600 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	-------PP---	MANUAL	31 AUG 28	6 SEP 25	--- ---	---	---	---	---
1975	----PP--P---	MANUAL	69 JUN 17	6 SEP 25	--- ---	---	---	---	---
1976	---PPP-PP---	MANUAL	238 JUN 22	10 SEP 22	--- ---	---	---	---	---
1977	----PP--P---	MANUAL	195 JUN 22	20 SEP 28	--- ---	---	---	---	---
1978	---PPPPPPP--	MANUAL	613 JUN 6	5 OCT 31	--- ---	---	---	---	---
1979	----PPPPPP--	MANUAL	632 MAY 29	7 OCT 30	--- ---	---	---	---	---
1980	---PPPPPPP--	MANUAL	1 610 JUN 6 *	11 OCT 15	--- ---	---	---	---	---
1981	---PPPPPPP--	MANUAL	80 MAY 19	6 OCT 7	--- ---	---	---	---	---
1982	-----PP-P---	MANUAL	694 JUL 7	34 SEP 20	--- ---	---	---	---	---
1983	-----PPPP---	MANUAL	67 JUN 8	8 SEP 27	--- ---	---	---	---	---
1984	----P-P-----	MANUAL	201 JUL 3	9 MAY 2	--- ---	---	---	---	---
1985	---PPP-PP---	MANUAL	80 MAY 29	4 OCT 9 *	--- ---	---	---	---	---
1986	----PPPP--P-	MANUAL	195 JUN 5	5 NOV 4	--- ---	---	---	---	---
1987	---P-PPPPP--	MANUAL	231 JUN 16	6 APR 22	--- ---	---	---	---	---
1988	----PPPPP-P-	MANUAL	63 JUN 15	4 NOV 2	--- ---	---	---	---	---
1989	----P-PPP-P-	MANUAL	615 AUG 5	5 NOV 1	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ATUSIS CREEK NEAR REDLAND - STATION NO. 05CE008

LOCATION: LAT 51 19 50 N LONG 113 03 15 W
DRAINAGE AREA: 76.9 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	30 MAY 10 *	30 MAY 10 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BATTLE RIVER NEAR THE SASKATCHEWAN BOUNDARY - STATION NO. 05FE004

LOCATION: LAT 52 51 23 N LONG 110 01 06 W
DRAINAGE AREA: 24 800 km²
TYPE OF FLOW: REGULATED SINCE 1973
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1980	---PPPPPP-P-	MANUAL	714 APR 18	17 JUN 25	--- ---	---	---	---	---
1981	---CCPPPP-P-	MANUAL	330 APR 5	7 JUL 29	967 APR 5	13 400	---	---	---
1982	---PPPPPP-P-	MANUAL	1 260 MAY 10	35 JUL 7	--- ---	---	---	---	---
1983	---PPPPPP-P-	MANUAL	480 APR 13	7 NOV 1	--- ---	---	---	---	---
1984	---PP-P-PP--	MANUAL	132 OCT 3	18 JUL 31	--- ---	---	---	---	---
1985	---PPPP-P---	MANUAL	1 180 APR 10	6 AUG 21 *	--- ---	---	---	---	---
1986	---P-PPPPP-	MANUAL	701 APR 7	21 JUL 3	--- ---	---	---	---	---
1987	---P--------	MANUAL	2 160 APR 7 *	317 APR 28	--- ---	---	---	---	---
1989	------P-----	MANUAL	26 JUL 11	25 JUL 11	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BEARBERRY CREEK NEAR SUNDRE - STATION NO. 05CA011

LOCATION: LAT 51 48 25 N LONG 114 42 30 W
DRAINAGE AREA: 227 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1977	---PPP------	MANUAL	302 MAY 30 *	58 JUN 16 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BEAVER CREEK NEAR BROCKET - STATION NO. 05AB013

LOCATION: LAT 49 38 21 N LONG 113 47 38 W
DRAINAGE AREA: 256 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----P------	MANUAL	100 JUN 1 *	100 JUN 1 *	--- ---	---	---	---	---
1972	--P-PP------	MANUAL	1 490 MAY 25 *	42 MAY 4 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BEAVER MINES CREEK NEAR BEAVER MINES - STATION NO. 05AA010

LOCATION: LAT 49 28 30 N LONG 114 09 30 W
DRAINAGE AREA: 62.4 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	93 MAY 4 *	7 MAY 4 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BEAVER RIVER ABOVE SYNCRUDE - STATION NO. 07DA018

LOCATION: LAT 56 56 29 N LONG 111 33 54 W
DRAINAGE AREA: 165 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PP-PPP---	MANUAL	232 SEP 7 *	11 APR 5 *	--- ---	---	---	---	---
1977	---PPPPPPP--	MANUAL	198 APR 18	6 SEP 22 *	--- ---	---	---	---	---
1979	----PPPPPP--	MANUAL	74 MAY 2	9 OCT 18	--- ---	---	---	---	---
1980	---PPPPPPP--	MANUAL	18 APR 24	7 OCT 24	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BEAVER RIVER AT COLD LAKE RESERVE - STATION NO. 06AD006

LOCATION: LAT 54 21 15 N LONG 110 13 00 W
DRAINAGE AREA: 14 500 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 24	16:35	0.0	24.4	33.0 K	DH59	39	183														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK

BEAVER RIVER AT COLD LAKE RESERVE - STATION NO. 06AD006

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	-------PP---	MANUAL	19 SEP 24		17 AUG 14		---	---	---	---	---	---
1975	---P--PPP---	MANUAL	399 APR 26	*	22 SEP 30		---	---	---	---	---	---
1976	---PPPPPP---	MANUAL	152 APR 13		10 MAY 19		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	109 APR 19		11 SEP 8		---	---	---	---	---	---
1978	---P-PPPPPP-	MANUAL	295 JUN 3		5 AUG 21		---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	278 MAY 1		7 OCT 30		---	---	---	---	---	---
1980	---P-PPPP---	MANUAL	102 APR 22		11 JUL 16		---	---	---	---	---	---
1981	---PPPP-P---	MANUAL	43 APR 23		3 SEP 10	*	---	---	---	---	---	---
1982	----P--PP---	MANUAL	41 MAY 11		6 SEP 22		---	---	---	---	---	---
1983	---P---P-P--	MANUAL	42 APR 18		8 OCT 26		---	---	---	---	---	---
1984	---PP--P-P--	MANUAL	83 APR 7		5 OCT 2		---	---	---	---	---	---
1985	---P--P--P--	MANUAL	62 APR 24		4 JUL 30		---	---	---	---	---	---
1986	-----P------	MANUAL	43 JUN 3		43 JUN 3		---	---	---	---	---	---
1987	----PP-P----	MANUAL	36 MAY 4		5 AUG 17		---	---	---	---	---	---
1988	----PPPP-P--	MANUAL	43 JUL 26		4 OCT 4		---	---	---	---	---	---
1989	----PPPP-P--	MANUAL	22 MAY 30		3 OCT 5		---	---	---	---	---	---
1990	---P--------	MANUAL	39 APR 24		39 APR 24		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BEAVER RIVER NEAR FORT MACKAY - STATION NO. 07DA005

LOCATION: LAT 57 06 00 N LONG 111 38 00 W
DRAINAGE AREA: 454 km²
TYPE OF FLOW: REGULATED SINCE 1975
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	---------P--	MANUAL	14 OCT 7		14 OCT 7	*	---	---	---	---	---	---
1975	---PP-PP----	MANUAL	111 APR 21	*	31 AUG 6		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BELLY RIVER NEAR GLENWOOD - STATION NO. 05AD041

LOCATION: LAT 49 21 08 N LONG 113 28 49 W
DRAINAGE AREA: 657 km²
TYPE OF FLOW: REGULATED SINCE 1935
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 30	12:25	6.0	39.1	2.0 K	DH48	472	156	08	13	27	36	55	70	84	97	100			30	57	13
JUN 28	11:55	15.0	15.8	16.0 X	DH48	34	104														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK
X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

BELLY RIVER NEAR GLENWOOD - STATION NO. 05AD041

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1985	----PPPPPP--	MANUAL	86 OCT 29		3 SEP 24		---	---	---	---	---	---
1986	--PPPPPP--P-	MANUAL	414 MAY 27		4 AUG 26		---	---	---	---	---	---
1987	--PPPPPPP-P-	MANUAL	98 APR 6		2 NOV 3	*	---	---	---	---	---	---
1988	--P-PPPPP-P-	MANUAL	23 SEP 28		4 NOV 3		---	---	---	---	---	---
1989	---PPP-PPP--	MANUAL	215 JUN 14		4 OCT 31		---	---	---	---	---	---
1990	----PP------	MANUAL	472 MAY 30	*	34 JUN 28		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

BELLY RIVER NEAR MOUNTAIN VIEW - STATION NO. 05AD005

LOCATION: LAT 49 06 00 N LONG 113 41 48 W
DRAINAGE AREA: 319 km²
TYPE OF FLOW: REGULATED SINCE 1935
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	-----P------	MANUAL	3 JUN 18		3 JUN 18	*	---	---	---	---	---	---
1971	----PP------	MANUAL	339 MAY 6	*	5 JUN 1		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

BELLY RIVER NEAR STAND OFF - STATION NO. 05AD002

LOCATION: LAT 49 28 40 N LONG 113 18 10 W
DRAINAGE AREA: 1 210 km²
TYPE OF FLOW: REGULATED SINCE 1935
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	-----P------	MANUAL	110 JUN 17		110 JUN 17		---	---	---	---	---	---
1971	----PP------	MANUAL	2 110 MAY 7		410 JUN 5		---	---	---	---	---	---
1974	------PPP-P-	MANUAL	53 JUL 30		4 SEP 25		---	---	---	---	---	---
1975	-PPPPPP-PP--	MANUAL	14 700 JUN 23	*	10 FEB 24		---	---	---	---	---	---
1976	---PPPPPPP--	MANUAL	187 MAY 31		4 SEP 14		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	150 AUG 30		8 SEP 29		---	---	---	---	---	---
1978	---P-PPPP-P-	MANUAL	863 JUN 1		5 SEP 28		---	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	1 650 MAY 28		3 OCT 31		---	---	---	---	---	---
1980	--PPPPPPPPP-	MANUAL	100 MAR 12		8 OCT 21		---	---	---	---	---	---
1981	--PP-PPPP-P-	MANUAL	85 JUN 25		8 AUG 24		---	---	---	---	---	---
1982	---PPPPP-----	MANUAL	468 JUN 23		3 JUL 21		---	---	---	---	---	---
1983	---PPPPPP-P-	MANUAL	489 MAY 30		2 NOV 1	*	---	---	---	---	---	---
1984	--P-PPPP----	MANUAL	27 JUN 26		5 MAR 27		---	---	---	---	---	---
1985	---PP-------	MANUAL	17 APR 3		6 MAY 1		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

BIG POINT CHANNEL BELOW DIVERGENCE - STATION NO. 07DD006

LOCATION: LAT 58 28 55 N LONG 110 48 15 W
DRAINAGE AREA:
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PPPPPP-P	MANUAL	1 510	JUN 17	3	DEC 21 *	---	---	---	---	---	---
1972	---P--PP----	MANUAL	821	JUL 7	7	APR 13	---	---	---	---	---	---
1973	-----PPPPP--	MANUAL	699	JUN 26	47	OCT 3	---	---	---	---	---	---
1974	-----PPPPP--	MANUAL	428	JUN 27	30	OCT 17	---	---	---	---	---	---
1975	-----PPPPPP--	MANUAL	1 010	JUL 5	49	SEP 30	---	---	---	---	---	---
1976	-----PPPPPP--	MANUAL	826	AUG 30	42	MAY 27	---	---	---	---	---	---
1977	-----PPPPPP--	MANUAL	628	MAY 20	40	OCT 4	---	---	---	---	---	---
1978	-----PPPPP--	MANUAL	508	SEP 12	77	AUG 21	---	---	---	---	---	---
1979	-----PPPPP--	MANUAL	394	JUL 11	41	OCT 3	---	---	---	---	---	---
1980	-----PPPPP--	MANUAL	2 860	JUN 12 *	69	OCT 7	---	---	---	---	---	---
1981	-----PPP-P--	MANUAL	169	JUL 30	12	OCT 2	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BIRCH RIVER BELOW ALICE CREEK - STATION NO. 07KE001

LOCATION: LAT 58 19 20 N LONG 113 04 05 W
DRAINAGE AREA: 9 860 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE VERTICAL SAMPLING (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 02	10:35	4.0	96.7	MID	X	DH59	401	180	13	19	35	47	64	74	87	98	100			26	55	19
JUN 24	10:45	18.0	26.3	1QRB	X	DH59	62	272														

NOTE: SINGLE VERTICAL LOCATED AT 1QLB (ONE QUARTER THE DISTANCE FROM THE LEFT BANK) FOR 1990

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

BIRCH RIVER BELOW ALICE CREEK - STATION NO. 07KE001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1970	----PP------	MANUAL	136	MAY 14	26	JUN 22	---	---	---	---	---	---
1971	----P-PPP---	MANUAL	45	SEP 14	22	AUG 2	---	---	---	---	---	---
1972	----PP2P----	MANUAL	131	MAY 25	8	AUG 28	---	---	---	---	---	---
1973	----P-P--P--	MANUAL	1 430	JUL 12	37	OCT 16	---	---	---	---	---	---
1974	-----PPP-P--	MANUAL	244	AUG 20	46	OCT 4	---	---	---	---	---	---
1975	----PPPPP---	MANUAL	6 320	AUG 25 *	88	JUL 21	---	---	---	---	---	---
1976	---PP-PPP-P-	MANUAL	637	APR 19	14	NOV 3	---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	385	APR 17	14	SEP 20	---	---	---	---	---	---
1978	---PPPPPP---	MANUAL	1 300	APR 29	20	JUL 26	---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	835	MAY 19	20	JUL 27	---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	255	APR 23	12	MAY 23	---	---	---	---	---	---
1981	----P--PP----	MANUAL	61	MAY 26	5	AUG 27 *	---	---	---	---	---	---
1982	----PP-PP----	MANUAL	423	MAY 24	16	JUN 24	---	---	---	---	---	---
1983	---P-P-PP----	MANUAL	498	APR 30	11	SEP 15	---	---	---	---	---	---
1984	----P----P--	MANUAL	180	MAY 25	34	OCT 3	---	---	---	---	---	---
1985	---P-P-P----	MANUAL	1 270	APR 28	8	AUG 21	---	---	---	---	---	---
1986	----PP-P----	MANUAL	1 920	MAY 8	78	AUG 22	---	---	---	---	---	---
1987	----PP-P--P-	MANUAL	755	MAY 1	57	NOV 4	---	---	---	---	---	---
1988	----PPP-P---	MANUAL	1 030	MAY 3	135	JUN 20	---	---	---	---	---	---
1989	----PP-P-P--	MANUAL	1 690	MAY 5	19	OCT 26	---	---	---	---	---	---
1990	----PP------	MANUAL	401	MAY 2	62	JUN 24	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BLINDMAN RIVER NEAR BLUFFTON - STATION NO. 05CC008

LOCATION: LAT 52 45 22 N LONG 114 17 03 W
DRAINAGE AREA: 352 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	51 JUN 12 *	6 JUN 27 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BLOOD INDIAN CREEK NEAR THE MOUTH - STATION NO. 05CK001

LOCATION: LAT 50 57 26 N LONG 111 03 30 W
DRAINAGE AREA: 695 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	10 MAY 10 *	10 MAY 10 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BOW RIVER AT BANFF - STATION NO. 05BB001

LOCATION: LAT 51 10 30 N LONG 115 34 10 W
DRAINAGE AREA: 2 210 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	136 JUN 2 *	11 MAY 22 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BOW RIVER AT CALGARY - STATION NO. 05BH004

LOCATION: LAT 51 03 00 N LONG 114 03 00 W
DRAINAGE AREA: 7 860 km²
TYPE OF FLOW: REGULATED SINCE 1913
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 31	14:30	8.0	330	10LB	K D49	56	187														
JUN 03	10:15	10.0	533	WELB	K DIP	211															
JUN 05	15:50	7.0	431	20.0	K D49	79	163														

NOTE: SINGLE VERTICAL IS LOCATED AT 78 METRES FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK

BOW RIVER AT CALGARY - STATION NO. 05BH004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1972	---CCCCCCCCC	MANUAL	111 JUN 3	1 NOV 16	3 470 JUN 3	57 200	---	---	---
1973	CCCCCCCCCCCC	MANUAL	71 MAY 27	1 JUL 31	1 470 MAY 27	30 800	84.4	84.4	---
1974	CCCCCCCCCCCC	MANUAL	105 JUN 26	0 JAN 29 *	4 320 JUN 26 *	63 300 *	178	131	35.8
1975	CCCCCCCCCCCC	MANUAL	29 JUN 9	1 JAN 1	331 JUN 9	11 300	31.0	98.0	44.0
1976	CCCCCCCCCCCC	MANUAL	36 OCT 15	0 SEP 2	688 AUG 7	21 400	58.8	88.2	36.3
1977	CCCCCCCCCCCC	MANUAL	19 JUN 10	0 JAN 1	341 JUN 10	12 600	34.5	77.4	34.9
1978	CCCCCCCCCCCC	MANUAL	57 JUN 7	2 JAN 1	1 090 JUN 10	30 200	82.7	78.3	28.2
1979	P-PPP-------	MANUAL	20 APR 11	2 JAN 26	--- ---	---	---	---	---
1981	----PP-P-P--	MANUAL	92 MAY 26	2 OCT 21	--- ---	---	---	---	---
1982	---P-P-PP-P-	MANUAL	17 APR 28	1 SEP 2	--- ---	---	---	---	---
1983	----PPPPP---	MANUAL	11 JUN 1	2 JUL 22	--- ---	---	---	---	---
1984	----P-P-P---	MANUAL	11 JUL 3	3 MAY 1	--- ---	---	---	---	---
1985	---PPPPPPP--	MANUAL	13 MAY 24	4 APR 12	--- ---	---	---	---	---
1986	--PP-PP-PPP-	MANUAL	88 JUN 2	2 OCT 22	--- ---	---	---	---	---
1987	---PPPPPPP--	MANUAL	7 APR 10	4 AUG 13	--- ---	---	---	---	---
1988	----PP------	MANUAL	25 JUN 14	9 MAY 19	--- ---	---	---	---	---
1989	----PPP-----	MANUAL	12 JUN 15	3 JUL 13	--- ---	---	---	---	---
1990	----PP------	MANUAL	211 JUN 3 *	56 MAY 31	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BOW RIVER AT LAKE LOUISE - STATION NO. 05BA001

LOCATION: LAT 51 25 42 N LONG 116 11 15 W
DRAINAGE AREA: 421 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	16 MAY 12 *	16 MAY 12 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BOW RIVER BELOW BASSANO DAM - STATION NO. 05BM004

LOCATION: LAT 50 45 00 N LONG 112 32 20 W
DRAINAGE AREA: 20 300 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1972	-----CCCCC--		426 JUN 3	4 AUG 8	18 600 JUN 3	308 000	---	---	---
1973	---PCCCCCC--		174 MAY 28	3 MAY 13	4 720 MAY 28	90 800	491	491	---
1974	---PCCCCCP-		1 100 APR 30 *	2 AUG 28	32 600 JUN 18 *	542 000 *	2 710	1 600	69.3
1975	----P-PPP-P-	MANUAL	102 MAY 9	6 JUL 28	--- ---	---	---	---	---
1976	---PPPPPPP--	MANUAL	134 AUG 10	5 JUN 7	--- ---	---	---	---	---
1977	---PPPPPP-P-	MANUAL	16 AUG 22	3 JUL 12	--- ---	---	---	---	---
1978	----PPPPPP--	MANUAL	174 JUN 13	6 AUG 8	--- ---	---	---	---	---
1979	---PPPPPPP--	MANUAL	73 APR 20	0 JUL 30 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BOYER RIVER NEAR FORT VERMILION - STATION NO. 07JF002

LOCATION: LAT 58 26 42 N LONG 116 16 10 W
DRAINAGE AREA: 6 660 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	--------PP--	MANUAL	10	OCT 31	9	SEP 17	---	---	---	---	---	---
1975	---PPP-PPP--	MANUAL	162	MAY 1	6	AUG 7	---	---	---	---	---	---
1976	---PPPPPP---	MANUAL	136	APR 21	9	JUN 23	---	---	---	---	---	---
1977	---P-PP-PP--	MANUAL	49	APR 28	4	SEP 9 *	---	---	---	---	---	---
1978	-----PPP--P--	MANUAL	45	MAY 9	18	OCT 4	---	---	---	---	---	---
1979	------PPP-P-	MANUAL	31	JUL 26	4	AUG 16	---	---	---	---	---	---
1980	-----P------	MANUAL	15	JUN 5	15	JUN 5	---	---	---	---	---	---
1981	-----PP------	MANUAL	13	MAY 27	12	JUN 30	---	---	---	---	---	---
1982	-----P-------	MANUAL	95	MAY 4	23	MAY 20	---	---	---	---	---	---
1983	-----PP------	MANUAL	36	MAY 5	11	JUN 2	---	---	---	---	---	---
1984	----PPPPPP--	MANUAL	73	MAY 2	9	AUG 29	---	---	---	---	---	---
1985	-----PPPPPP--	MANUAL	20	OCT 30	5	JUL 23	---	---	---	---	---	---
1986	-----PPPPPP--	MANUAL	48	MAY 12	6	AUG 26	---	---	---	---	---	---
1987	-----PPPPPP--	MANUAL	89	OCT 29	11	JUN 24	---	---	---	---	---	---
1988	---PPPPPP-P-	MANUAL	164	APR 19 *	7	SEP 29	---	---	---	---	---	---
1989	---PPPPPP-P-	MANUAL	136	MAY 2	4	NOV 2	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BRIDLEBIT CREEK NEAR VALLEYVIEW - STATION NO. 07GF005

LOCATION: LAT 54 56 10 N LONG 117 44 02 W
DRAINAGE AREA: 19.7 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1967	----PCCCCCCC	MANUAL	90	MAY 11	0	JUL 11 *	4.0	MAY 11	12.2	---	---	---
1968	CCCCCCCCCCC	MANUAL	154	JUN 13 *	0	JAN 1	17.3	JUN 14 *	38.5	0.527	0.527	---
1969	--CCCCCCCCCC	MANUAL	20	APR 29	0	MAR 1	2.0	APR 29	12.6	0.154	0.34	54.8
1970	--CCCCCCCCC-	MANUAL	12	APR 22	0	MAR 1	0.7	APR 23	7.60	0.079	0.25	54.7
1971	--CCCCCCCC--	MANUAL	42	APR 20	0	MAR 1	2.1	JUL 12	13.5	0.082	0.21	50.8
1972	--CCCCCCCC--	MANUAL	70	JUN 26	0	MAR 1	11.6	JUN 26	45.*	0.265	0.22	37.7
1973	CCCCCCCCCP-	MANUAL	49	APR 24	0	JAN 1	5.0	APR 24	26.5	0.332	0.24	29.5
1974	--CCCCCCCC--	MANUAL	47	APR 23	0	MAR 1	11.0	APR 23	29.9	0.340	0.25	24.2
1975	-----PPP-----	MANUAL	10	JUN 18	6	JUL 9	---	---	---	---	---	---
1978	---P---PPP--	MANUAL	65	APR 27	4	OCT 3	---	---	---	---	---	---
1979	----PPPP----	MANUAL	40	MAY 18	9	JUL 5	---	---	---	---	---	---
1980	---------PP-	MANUAL	51	OCT 8	7	NOV 12	---	---	---	---	---	---
1981	--PPPPP-----	MANUAL	107	JUL 23	6	APR 8	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BULLPOUND CREEK NEAR HANNA - STATION NO. 05CG002

LOCATION: LAT 51 39 00 N LONG 112 00 30 W
DRAINAGE AREA: 209 km²
TYPE OF FLOW: REGULATED SINCE 1976
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	12	MAY 10 *	12	MAY 10 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CABIN CREEK NEAR SEEBE - STATION NO. 05BF019

LOCATION: LAT 50 57 33 N LONG 115 10 00 W
DRAINAGE AREA: 2.12 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1969	CCCCCCCCCCCC	MANUAL	43 JUN 29	0 JAN 1 *	1.1JUN 29	7.53	0.042	0.042	---
1970	CCCCCCCCCCCC	MANUAL	72 JUN 16	0 JAN 1	1.6JUN 16	8.57	0.046	0.04	4.8
1971	CCCCCCCCCCCC		239 JUN 6 *	0 JAN 1	9.1JUN 6 *	25.*	0.151	0.08	45.1
1972	CCCCCCCCCCCC		31 JUN 1	0 JAN 1	0.6JUN 1	5.01	0.071	0.07	32.9
1973	CCCCCCCCCCCC		20 JUN 5	0 JAN 1	0.2JUN 5	1.74	0.017	0.06	35.5
1974	CCCCCCCCCCCC		86 JUN 12	0 JAN 1	2.2JUN 16	14.7	0.096	0.07	27.8
1975	CCCCCCCCCCCC		22 MAY 22	0 JAN 1	0.0MAY 22	1.07	0.013	0.06	29.7
1976	CCCCCCCCCCCC		19 MAY 16	0 JAN 1	0.1MAY 16	3.75	0.022	0.05	29.4
1977	CCCCCCCCCCCC		24 MAY 24	0 JAN 1	0.1MAY 24	1.34	0.008	0.05	30.5
1978	CCCCCCCCCCCC		25 JUN 4	0 AUG 11	0.3JUN 4	5.66	0.026	0.04	29.2
1979	P---PCCCCCP-		54 AUG 16	0 JUN 13	0.3MAY 26	2.63	---	---	---
1980	--CCCCCCCC--	MANUAL	24 JUL 8	0 MAY 5	0.2JUN 10	4.67	0.020	0.04	28.4
1981	----CCCCCC--	MANUAL	30 JUN 1	1 JUN 11	0.4JUN 2	8.61	---	---	---
1982	------CCCP---	MANUAL	48 SEP 11	1 JUN 23	0.4JUN 10	6.84	---	---	---
1983	----PCCCP---	MANUAL	36 MAY 13	1 MAY 31	0.1JUL 3	2.83	---	---	---
1986	----P-------	MANUAL	151 MAY 28	151 MAY 28	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CACHE PERCOTTE CREEK NEAR HINTON - STATION NO. 07AD003

LOCATION: LAT 53 24 08 N LONG 117 30 27 W
DRAINAGE AREA: 7.15 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1966	-----CCCC---	MANUAL	23 AUG 5	1 JUL 12	0.5AUG 5	5.00	---	---	---
1967	----CCCCC---	MANUAL	60 JUN 18	0 JUL 1 *	1.5JUN 18	8.47	---	---	---
1968	----CCCCCC--	MANUAL	18 MAY 10	1 JUN 2	0.0MAY 9	0.867	---	---	---
1969	----CPPPC---	MANUAL	500 AUG 5 *	0 MAY 23	30.3AUG 5 *	32.*	---	---	---
1970	--CCCCCCCC--	MANUAL	32 MAY 11	0 MAR 1	0.2JUL 29	2.88	0.021	0.021	---
1971	----CCCCCC--	MANUAL	81 JUL 11	0 JUL 15	4.5JUL 11	18.4	---	---	---
1972	--CCCCCCCC--	MANUAL	85 JUN 25	0 MAR 1	3.2JUN 25	7.65	0.067	0.04	52.5
1973	----CCCCCC--	MANUAL	14 MAY 27	0 AUG 20	0.3MAY 27	3.08	---	---	---
1974	------PP----	MANUAL	13 AUG 8	2 JUL 31	--- ---	---	---	---	---
1975	----CCCCCC--	MANUAL	36 AUG 15	1 JUN 9	0.6JUN 28	2.70	---	---	---
1976	---PCCCCCC--	MANUAL	129 AUG 16	0 JUN 18	3.0AUG 16	4.32	---	---	---
1977	---PCCCCCC--	MANUAL	203 AUG 12	1 APR 16	3.3MAY 11	27.9	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CARDINAL RIVER NEAR THE MOUTH - STATION NO. 05DD008

LOCATION: LAT 52 52 04 N LONG 116 35 43 W
DRAINAGE AREA: 495 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	52 JUN 15 *	32 MAY 14 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CASTLE RIVER AT RANGER STATION - STATION NO. 05AA028

LOCATION: LAT 49 23 55 N LONG 114 20 20 W
DRAINAGE AREA: 376 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	110 MAY 6	13 MAY 23 *	--- ---	---	---	---	---
1972	----PP------	MANUAL	943 JUN 1 *	18 MAY 4	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CASTLE RIVER NEAR BEAVER MINES - STATION NO. 05AA022

LOCATION: LAT 49 29 20 N LONG 114 08 40 W
DRAINAGE AREA: 823 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	130 JUN 1	40 MAY 23	--- ---	---	---	---	---
1972	--P-PP------	MANUAL	363 JUN 1 *	10 MAR 24 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CATARACT CREEK NEAR FORESTRY ROAD - STATION NO. 05BL022

LOCATION: LAT 50 17 04 N LONG 114 35 25 W
DRAINAGE AREA: 166 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	172 JUN 6	10 MAY 8	--- ---	---	---	---	---
1972	----PP------	MANUAL	266 MAY 31 *	50 MAY 17	--- ---	---	---	---	---
1976	----P--P-----	MANUAL	28 MAY 13	1 AUG 4 *	--- ---	---	---	---	---
1977	----P-------	MANUAL	20 MAY 24	4 MAY 16	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CHENAL DES QUATRE FOURCHES BELOW FOUR FORKS - STATION NO. 07KF006

LOCATION: LAT 58 39 05 N LONG 111 17 50 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----PPPPP--	MANUAL	2 580 JUL 21	*	14 JUN 11		---	---	---	---	---	---
1972	-----PPP-----	MANUAL	920 JUL 20		9 AUG 21	*	---	---	---	---	---	---
1973	-----PPPPP--	MANUAL	551 JUN 28		20 AUG 8		---	---	---	---	---	---
1974	-----PPP--P-	MANUAL	240 NOV 1		47 JUL 8		---	---	---	---	---	---
1975	-----PPPPPP--	MANUAL	869 SEP 8		160 SEP 22		---	---	---	---	---	---
1977	-----PPPPPP--	MANUAL	1 300 JUN 15		34 AUG 22		---	---	---	---	---	---
1978	-----PPPPP--	MANUAL	1 190 JUL 11		35 AUG 21		---	---	---	---	---	---
1979	-----PPPP---	MANUAL	172 JUL 5		15 AUG 16		---	---	---	---	---	---
1980	-----PPPPP--	MANUAL	407 JUN 18		34 SEP 18		---	---	---	---	---	---
1981	-----PPPPP--	MANUAL	119 JUL 10		21 AUG 6		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

CLEARWATER RIVER AT DRAPER - STATION NO. 07CD001

LOCATION: LAT 56 41 07 N LONG 115 15 15 W
DRAINAGE AREA: 30 800 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 05	15:10	5.0	385	MID	D49	347 C	117														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

CLEARWATER RIVER AT DRAPER - STATION NO. 07CD001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1966	--------P---	MANUAL	37 SEP 28		37 SEP 28		---	---	---	---	---	---
1967	----PP-PPP-P	MANUAL	330 MAY 12		6 DEC 12		---	---	---	---	---	---
1968	PPPPPPPPPP-P	MANUAL	369 JUL 4		3 MAR 21	*	---	---	---	---	---	---
1969	CCCCCCCCCCCC	MANUAL	2 030 APR 21		3 AUG 24		79 500 APR 21		610 000	2 470	2 470	---
1970	CCCCCCCCCCCC	MANUAL	2 360 JUL 2		5 JAN 15		137 000 JUL 2	*	1 630 000	* 6 580	4 520	45.5
1971	CCCCCCCCCCCC	MANUAL	1 560 APR 24		6 JAN 29		66 000 APR 24		688 000	2 780	3 940	33.5
1972	CCCCCCCCCCCC	MANUAL	1 420 MAY 4		3 DEC 24		47 200 MAY 4		485 000	1 960	3 450	30.6
1973	CCCCCCCCC---	MANUAL	2 410 AUG 7	*	3 JAN 1		80 400 AUG 7		990 000	---	---	---
1974	----CCCCCC--	MANUAL	1 130 MAY 1		50 OCT 30		76 500 MAY 1		1 240 000	---	---	---
1975	P-P-PCCCCC--	MANUAL	1 020 JUL 17		7 MAR 16		35 500 JUL 18		1 020 000	---	---	---
1976	PPCCCCCCCC--	MANUAL	1 260 AUG 28		10 MAR 1		35 200 AUG 28		717 000	2 920	3 340	24.7
1977	---CCCCCCC--	MANUAL	852 MAY 20		13 OCT 29		17 600 MAY 31		455 000	---	---	---
1978	CCCCCCCCCCCC	MANUAL	675 APR 29		4 DEC 10		17 700 APR 30		528 000	2 120	3 140	22.4
1979	CCCCCCCCC--	MANUAL	1 030 MAY 17		7 JAN 1		46 800 MAY 17		873 000	3 550	3 200	18.7
1980	---CCCCCCC--	MANUAL	1 050 AUG 5		11 JUL 29		25 300 AUG 18		552 000	---	---	---
1981	----PCCC----	MANUAL	600 JUN 27		4 SEP 30		1 320 JUL 17		34 500	---	---	---
1982	------CCC---	MANUAL	50 AUG 12		4 JUL 19		711 JUN 1		30 900	---	---	---
1983	---PPCCCP---	MANUAL	123 APR 29		18 JUN 20		2 010 APR 29		62 500	---	---	---
1984	---PPPPP----	MANUAL	218 MAY 24		21 MAY 8		---	---	---	---	---	---
1985	----CCCCC---	MANUAL	1 150 MAY 6		29 JUL 3		52 200 MAY 6		505 000	---	---	---
1986	----CCCCCC--	MANUAL	2 010 JUN 21		7 AUG 17		16 500 JUL 20		216 000	---	---	---
1987	---PCCCCCC--	MANUAL	374 APR 24		10 OCT 22		10 400 APR 24		157 000	---	---	---
1988	----P-P-P---	MANUAL	114 JUL 2		30 SEP 11		---	---	---	---	---	---
1989	----PP-P----	MANUAL	105 JUN 25		27 AUG 28		---	---	---	---	---	---
1990	----P-------	MANUAL	347 MAY 5		347 MAY 5		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

CLEARWATER RIVER NEAR ROCKY MOUNTAIN HOUSE - STATION NO. 05DB001

LOCATION: LAT 52 20 40 N LONG 114 56 10 W
DRAINAGE AREA: 3 220 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----P------	MANUAL	1 380 JUN 7 *	46 JUN 12	--- ---	---	---	---	---
1972	---PPP------	MANUAL	220 JUN 17	6 APR 26 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CONNOR CREEK NEAR ROCHFORT BRIDGE - STATION NO. 07BB010

LOCATION: LAT 54 02 53 N LONG 115 02 31 W
DRAINAGE AREA: 64.5 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1975	----P-------	MANUAL	27 MAY 8 *	27 MAY 8 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CONNOR CREEK NEAR SANGUDO - STATION NO. 07BB009

LOCATION: LAT 54 01 23 N LONG 114 56 39 W
DRAINAGE AREA: 165 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1975	---P--------	MANUAL	44 APR 23 *	18 APR 21 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CROWFOOT CREEK NEAR CLUNY - STATION NO. 05BM008

LOCATION: LAT 50 50 00 N LONG 112 45 40 W
DRAINAGE AREA: 1 360 km²
TYPE OF FLOW: REGULATED SINCE 1914
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1977	----P-------	MANUAL	9 MAY 17 *	9 MAY 17 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

CROWSNEST RIVER AT FRANK - STATION NO. 05AA008

LOCATION: LAT 49 35 49 N LONG 114 24 33 W
DRAINAGE AREA: 404 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 04	17:20	7.0	25.6	2.0	K	DH48	25	196														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK

CROWSNEST RIVER AT FRANK - STATION NO. 05AA008

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)				TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1969	-----P------	MANUAL	147	JUN 26			147	JUN 26			---	---			---	---	---	---
1971	----PP------	MANUAL	217	MAY 5			24	JUN 1			---	---			---	---	---	---
1972	----PP------	MANUAL	602	MAY 31	*		42	JUN 9			---	---			---	---	---	---
1974	------P-PP--	MANUAL	8	JUL 23			3	OCT 2			---	---			---	---	---	---
1975	----PPPPPPP-	MANUAL	564	JUN 20			2	SEP 2			---	---			---	---	---	---
1976	---CCCCCCCP-	MANUAL	174	JUL 31			2	OCT 5			271	AUG 6			3 760	---	---	---
1977	--CCCCCCCCCC	MANUAL	25	JUN 8			4	APR 13			13.7	JUN 8			714	2.75	2.75	---
1978	CCCCCCCCCCCC	MANUAL	83	JUN 6			2	OCT 19			157	JUN 6			2 610	10.4	6.50	58.2
1979	CCCCCCCCCC--	MANUAL	202	MAY 27			0	FEB 11	*		525	MAY 27			3 820	15.5	9.57	38.9
1980	--CCCCCCCC--	MANUAL	86	APR 30			4	AUG 17			161	APR 30			2 080	8.50	9.30	28.4
1981	----PP-PPP--	MANUAL	61	MAY 1			5	SEP 3			---	---			---	---	---	---
1982	---PPPP-P---	MANUAL	28	APR 15			2	SEP 16			---	---			---	---	---	---
1983	--PPPP-P-P--	MANUAL	98	MAR 30			3	SEP 1			---	---			---	---	---	---
1984	---PPPPPP---	MANUAL	35	APR 4			4	AUG 21			---	---			---	---	---	---
1985	---PPPPPPP--	MANUAL	24	APR 29			3	AUG 28			---	---			---	---	---	---
1986	--PPPP-PP-P-	MANUAL	255	MAY 28			3	MAR 26			---	---			---	---	---	---
1987	--PPPPPPP-P-	MANUAL	18	APR 7			2	AUG 27			---	---			---	---	---	---
1988	--P-PPPPP-P-	MANUAL	16	MAY 5			5	MAR 23			---	---			---	---	---	---
1989	---PPP-PPP--	MANUAL	285	AUG 3			2	SEP 29			---	---			---	---	---	---
1990	-----P------	MANUAL	25	JUN 4			25	JUN 4			---	---			---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

DEER CREEK (MAIN STEM) NEAR SUNDRE - STATION NO. 05CA003

LOCATION: LAT 51 39 25 N LONG 115 08 00 W
DRAINAGE AREA: 5.44 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)				TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1968	----CCCCCCCC	MANUAL	82	JUN 8			0	OCT 18	*		0.2	JUN 8			5.89	0.035	0.035	---
1969	CCCCCCCCCC--	MANUAL	109	JUL 6	*		0	JAN 1			5.5	JUL 6	*		62.*	0.333	0.18	81.2

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004

LOCATION: LAT 53 09 20 N LONG 117 14 36 W
DRAINAGE AREA: 14 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-OCT STANDARD ERROR OF MEAN %
1967	-----CCCCC--	MANUAL	90 JUN 9	0 JUN 4 *	13.3JUN 9	32.0	---	---	---
1968	----CCCCCC--	MANUAL	59 JUL 22	2 MAY 13	5.8JUL 22	37.4	---	---	---
1969	----CCCCCC--	MANUAL	1 090 AUG 5 *	2 JUL 24	126 JUL 5	246	---	---	---
1970	----CCCCCC--	MANUAL	75 JUN 16	0 AUG 16	9.8JUN 16	32.5	---	---	---
1971	---CCCCCCC--	MANUAL	139 JUN 8	0 APR 1	26.2JUN 9	112	0.630	0.630	---
1972	----CCCCCC--	MANUAL	224 JUN 25	1 AUG 22	36.6JUN 25	115	---	---	---
1973	---CCCCCCCP-	MANUAL	206 MAY 16	0 APR 1	16.2MAY 16	101	0.535	0.58	8.2
1974	---CCCCCCC--	MANUAL	220 JUL 11	0 APR 1	12.4MAY 6	78.6	0.405	0.52	12.5
1975	---CCCCCCC--	MANUAL	375 MAY 6	1 APR 1	8.1MAY 9	75.3	0.352	0.48	13.1
1976	---CCCCCCC--	MANUAL	920 JUN 16	1 APR 1	45.0JUN 16	172	0.802	0.54	14.8
1977	--PCCCCCCC--	MANUAL	262 JUL 6	2 MAR 23	15.8JUL 6	215	1.00	0.62	16.2
1978	---CCCCCCC--	MANUAL	363 AUG 17	1 APR 1	35.1MAY 16	247	1.15	0.69	16.4
1979	----CCCCC---	MANUAL	556 MAY 17	0 JUL 30	29.0MAY 17	92.6	---	---	---
1980	---CCCCCC---	MANUAL	345 JUN 4	1 APR 1	261 JUN 4	561 *	---	---	---
1981	----CCCCC---	MANUAL	150 MAY 15	1 JUN 28	10.2MAY 15	71.9	---	---	---
1982	---CCCCCCCP-	MANUAL	1 090 JUL 4	1 APR 1	295 JUL 4 *	532	2.48	0.92	26.5
1983	---CCCCCCCP-	MANUAL	146 JUN 24	0 AUG 3	9.8JUN 24	117.0	0.184	0.83	27.5
1984	--PCCCCCCC--	MANUAL	120 JUN 8	0 MAY 23	7.7JUN 8	28.2	0.151	0.77	28.2
1985	---CCCCCCC--	MANUAL	297 SEP 13	0 APR 20	20.4AUG 15	68.7	0.332	0.73	27.5
1986	----PCCCCC--	MANUAL	305 JUL 16	0 JUN 7	95.0JUL 17	216	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

DOVER RIVER NEAR THE MOUTH - STATION NO. 07DB002

LOCATION: LAT 57 10 12 N LONG 111 47 38 W
DRAINAGE AREA: 963 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1977	-----PPPPP--	MANUAL	8 JUN 27 *	6 AUG 22 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 07BH003

LOCATION: LAT 55 20 48 N LONG 115 47 39 W
DRAINAGE AREA: 840 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-OCT MEAN LOAD (TONNES)	SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-OCT STANDARD ERROR OF MEAN %
1977	---PPPPPPP--	MANUAL	963 APR 15	13 AUG 24	--- ---	---	---	---	---
1979	----CCCCCCP-	MANUAL	6 790 JUN 14	11 SEP 30	109 000 JUN 14	425 000 *	2 310	2 310	---
1980	-P-CCCCCCC--	MANUAL	3 340 MAY 28	10 OCT 25	9 060 MAY 28	35 300	165	1 240	86.7
1981	---PCCCCCC--	MANUAL	2 950 JUL 23	5 SEP 4	6 960 JUL 23	28 900	150	874	82.0
1982	----PCCPPC--	MANUAL	2 010 AUG 4	2 OCT 10 *	19 300 AUG 4	46 400	---	---	---
1983	---PCCCCCC--	MANUAL	4 400 JUN 25	5 JUN 3	98 500 JUN 26	370 000	2 010	1 160	50.2
1984	---CCCCCC---	MANUAL	5 150 JUL 2	8 SEP 2	27 800 JUN 7	148 000	---	---	---
1985	---PCCCCCC--	MANUAL	4 020 JUN 25	6 AUG 24	16 800 MAY 4	128 000	585	1 040	44.5
1986	---CCCCCCC--	MANUAL	9 160 JUN 3 *	8 JUL 5	117 000 JUL 18 *	305 000	1 590	1 140	34.4

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

DUNKIRK RIVER NEAR FORT MACKAY - STATION NO. 07DB003

LOCATION: LAT 56 51 20 N LONG 112 42 40 W
DRAINAGE AREA: 1 570 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1977	-----PPPPP--	MANUAL	10 JUL 26		3 SEP 21	*	---	---	---	---	---	---
1978	---PPPPPPP--	MANUAL	42 MAY 2	*	5 AUG 22		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

DUTCH CREEK NEAR THE MOUTH - STATION NO. 05AA026

LOCATION: LAT 49 54 06 N LONG 114 25 49 W
DRAINAGE AREA: 143 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	175 JUN 5		19 MAY 23		---	---	---	---	---	---
1972	----PP------	MANUAL	675 MAY 31	*	10 MAY 4	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

EAST PRAIRIE RIVER NEAR ENILDA - STATION NO. 07BF001

LOCATION: LAT 55 25 00 N LONG 116 20 20 W
DRAINAGE AREA: 1 460 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1973	----P-------	MANUAL	1 110 MAY 1		1 100 MAY 1		---	---	---	---	---	---
1974	---PP--PPP--	MANUAL	3 500 MAY 8		17 OCT 29		---	---	---	---	---	---
1975	---PPPPPPP--	MANUAL	5 730 JUL 19		32 SEP 26		---	---	---	---	---	---
1976	---PPPP-PP--	MANUAL	10 000 JUN 27		46 OCT 7		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	3 990 APR 13		27 AUG 25		---	---	---	---	---	---
1978	--------PP--	MANUAL	524 OCT 23		47 SEP 27		---	---	---	---	---	---
1979	---PPPPPP---	MANUAL	9 260 JUL 3		31 SEP 19		---	---	---	---	---	---
1980	----PPPPPP--	MANUAL	635 JUN 1		38 JUL 28		---	---	---	---	---	---
1981	----P-P-PP--	MANUAL	178 MAY 27		21 JUL 7		---	---	---	---	---	---
1982	---PPPP-PP--	MANUAL	10 100 MAY 4		26 OCT 4		---	---	---	---	---	---
1983	---PPPPP-P--	MANUAL	12 300 JUN 26	*	55 OCT 24		---	---	---	---	---	---
1984	---PPPPPP---	MANUAL	5 040 JUN 9		33 SEP 24		---	---	---	---	---	---
1985	---PPPPPP---	MANUAL	4 130 MAY 6		13 AUG 29	*	---	---	---	---	---	---
1986	---PPPPPPP--	MANUAL	5 620 JUL 16		24 SEP 22		---	---	---	---	---	---
1987	---PPP-PPP--	MANUAL	900 APR 22		13 OCT 26		---	---	---	---	---	---
1988	---PPPPPPP--	MANUAL	10 300 JUN 10		40 SEP 29		---	---	---	---	---	---
1989	---PPPPPPP--	MANUAL	9 860 MAY 21		62 JUN 19		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ALBERTA

EAST STREETER CREEK NEAR NANTON - STATION NO. 05AB024

LOCATION: LAT 50 06 31 N LONG 114 02 58 W
DRAINAGE AREA: 0.52 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-SEP MEAN LOAD (TONNES)	SUMMARY : APR-SEP HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-SEP STANDARD ERROR OF MEAN %
1965	---CCCCCCCCC	MANUAL	55 MAY 8 *	0 APR 1 *	0.0JUL 1	2.36	0.014	0.014	---
1966	CCCCCCCCCCCC	MANUAL	65 JUN 6 *	0 JAN 4	0.2JUN 7 *	2.*	0.013	0.01	2.4
1967	CCCCCCCCC---	MANUAL		0 JAN 1	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

ELBOW RIVER ABOVE ELBOW FALLS - STATION NO. 05BJ006

LOCATION: LAT 50 51 20 N LONG 114 47 37 W
DRAINAGE AREA: 437 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	1 060 JUN 7 *	6 JUN 2 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ELBOW RIVER AT BRAGG CREEK - STATION NO. 05BJ004

LOCATION: LAT 50 56 53 N LONG 114 34 10 W
DRAINAGE AREA: 791 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 26	14:30	5.0	129	WER8	DIP	1216															

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

ELBOW RIVER AT BRAGG CREEK - STATION NO. 05BJ004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1967	------P------	MANUAL			0 JUL 4		---	---	---	---	---	---
1968	-----C------	MANUAL	543 JUN 8		7 JUN 22		1 320 JUN 8	*	4 680	---	---	---
1969	----CCCCCC--	MANUAL	1 280 JUN 25		0 AUG 12	*	11 700 JUN 29	*	60 600	* ---	---	---
1970	---PPP------	MANUAL	1 200 JUN 16		2 APR 27		---	---	---	---	---	---
1971	--CCCCCCCCCC	MANUAL	1 520 JUN 6	*	0 MAR 1		6 360 JUN 6		17 900	94.6	94.6	---
1972	CCCCCCCCCC--	MANUAL	566 MAY 31		0 JAN 1		1 890 MAY 31		13 900	63.8	79.2	19.4
1973	--CCCCCCCCP-	MANUAL	380 MAY 26		0 MAR 1		1 220 MAY 26		7 360	35.6	64.7	26.3
1974	--CCCCCCCCP-	MANUAL	1 050 JUN 17		1 APR 5		5 820 JUN 17		34 300	140	83.5	26.8
1975	--CCCCCCCC--	MANUAL	371 JUN 20		0 MAY 13		1 580 JUN 20		6 050	27.1	72.3	28.6
1976	----PPPPP---	MANUAL	5 MAY 3		1 JUN 3		---	---	---	---	---	---
1977	---PP-PPP---	MANUAL	7 APR 5		1 MAY 4		---	---	---	---	---	---
1978	----PP-PP---	MANUAL	440 JUN 6		1 AUG 30		---	---	---	---	---	---
1979	---PP-PPP---	MANUAL	13 MAY 29		0 JUL 25		---	---	---	---	---	---
1980	---PP-PP-P--	MANUAL	20 MAY 30		2 JUL 30		---	---	---	---	---	---
1981	----PPPP----	MANUAL	940 MAY 26		2 AUG 26		---	---	---	---	---	---
1982	----PPPPP---	MANUAL	21 JUN 7		1 SEP 28		---	---	---	---	---	---
1983	---PPPPP----	MANUAL	64 JUN 24		3 AUG 17		---	---	---	---	---	---
1984	----PPPP----	MANUAL	59 JUN 11		0 MAY 3		---	---	---	---	---	---
1985	----PPPPPP--	MANUAL	346 SEP 13		2 OCT 30		---	---	---	---	---	---
1986	--PPPPPPP-P-	MANUAL	36 MAY 22		1 MAR 19		---	---	---	---	---	---
1987	------PPPP-P-	MANUAL	62 JUL 22		1 JUN 4		---	---	---	---	---	---
1988	----PPP-PPP-	MANUAL	7 MAY 20		1 JUL 21		---	---	---	---	---	---
1989	----PPPPPP--	MANUAL	17 JUN 14		1 MAY 25		---	---	---	---	---	---
1990	----P-------	MANUAL	1 220 MAY 26		1 220 MAY 26		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ELLS RIVER NEAR THE MOUTH - STATION NO. 07DA017

LOCATION: LAT 57 16 04 N LONG 111 42 51 W
DRAINAGE AREA: ± 450 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1976	---PP-PPP-P-	MANUAL	1 500 APR 15	*	6 AUG 6		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	144 APR 26		4 JUN 27		---	---	---	---	---	---
1978	---PPPPPP---	MANUAL	1 490 APR 27		2 AUG 22	*	---	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	717 APR 30		6 JUL 26		---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	40 APR 24		2 JUN 24		---	---	---	---	---	---
1981	-----P-PP----	MANUAL	41 MAY 28		4 AUG 29		---	---	---	---	---	---
1982	------P-PP---	MANUAL	9 JUN 24		2 AUG 3		---	---	---	---	---	---
1983	---P-P-PP----	MANUAL	360 APR 26		6 JUN 21		---	---	---	---	---	---
1984	-----P--PP---	MANUAL	40 MAY 22		13 SEP 22		---	---	---	---	---	---
1985	---P-P------	MANUAL	797 APR 29		116 JUN 14		---	---	---	---	---	---
1986	----PP-P----	MANUAL	1 240 MAY 7		32 AUG 23		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

EMBARRAS RIVER BELOW DIVERGENCE - STATION NO. 07DD003

LOCATION: LAT 58 25 20 N LONG 111 33 05 W
DRAINAGE AREA:
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 02	17:00	0.0	294	80.0	DH59	670	148														
MAY 23	12:06	12.0	186	80.0	DH59	294	149														
JUN 07	13:23	14.0	373	80.0	DH59	863	160	18	26	40	52	72	84	89	96	100			16	58	26
JUN 20	11:05	16.0	582	80.0	DH59	862	165	19	27	41	50	65	78	86	97	100			22	51	27
JUN 27	14:47	17.0	311	80.0	DH59	414	154														
JUL 11	12:57	19.0	399	80.0	DH59	909	159	25	35	51	60	74	82	87	95	100			18	47	35
JUL 25	12:40	19.0	162	80.0	DH59	257	147														
AUG 08	11:07	18.0	99.1	80.0	DH59	96	166														
AUG 21	11:31	16.0	66.3	80.0	DH59	51	166														
SEP 20	13:07	12.0	31.2	80.0	DH59	20	197														

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

EMBARRAS RIVER BELOW DIVERGENCE - STATION NO. 07DD003

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PPPP-P-P	MANUAL	1 320	JUN 15			6	DEC 20	*		---	---	---	---	---	---
1972	------PP-----	MANUAL	1 010	JUL 4			60	AUG 22			---	---	---	---	---	---
1973	-----PPP-P---	MANUAL	1 700	JUN 21			94	OCT 11			---	---	---	---	---	---
1974	-----PPPP---	MANUAL	469	JUN 26			52	SEP 16			---	---	---	---	---	---
1976	----PPPPP---	MANUAL	973	AUG 30			29	JUN 10			---	---	---	---	---	---
1977	----PPPPPP--	MANUAL	658	MAY 20			65	SEP 19			---	---	---	---	---	---
1978	-----PPPPP--	MANUAL	395	SEP 18			78	AUG 22			---	---	---	---	---	---
1979	-----PPPP---	MANUAL	435	JUL 11			63	SEP 4			---	---	---	---	---	---
1980	-----PPPPP--	MANUAL	2 130	JUN 12	*		60	SEP 10			---	---	---	---	---	---
1981	-----PPP-----	MANUAL	247	JUL 31			117	JUL 15			---	---	---	---	---	---
1990	----PPPPP---	MANUAL	909	JUL 11			20	SEP 20			---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

EMBARRAS RIVER BREAKTHROUGH TO MAMAWI LAKE - STATION NO. 07KF015

LOCATION: LAT 58 28 48 N LONG 111 26 40 W
DRAINAGE AREA:
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)		DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 03	10:46	0.0	153	21.0	K	DH59	553		151														
MAY 23	14:31	12.0	104	20.0		DH59	335		151														
JUN 07	10:45	14.0	189	20.0		DH59	849		162														
JUN 20	09:48	16.0	288	21.0	K	DH59	1220		153	13	20	30	37	51	67	84	98	100			33	47	20
JUN 27	10:20	17.0	163	20.0		DH59	590	C	163														
JUL 11	11:45	19.0	231	20.0		DH59	1089		159	22	32	49	58	71	80	86	97	100			20	48	32
JUL 25	11:32	19.0	107	21.0	K	DH59	250		167														
AUG 08	09:47	18.0	634	21.0	K	DH59	77		166														
AUG 22	09:40	16.0	52.7	20.0		DH59	33		149														
SEP 04	10:15	15.0	45.4	22.0	K	DH59	29		165														
SEP 20	10:30	12.0	26.1	22.0	K	DH59	14		197														

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL, FROM LEFT BANK

EMBARRAS RIVER BREAKTHROUGH TO MAMAWI LAKE - STATION NO. 07KF015

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1990	----PPPPP---	MANUAL	1 220	JUN 20	*		14	SEP 20	*		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

EUNICE CREEK NEAR HINTON - STATION NO. 07AF005

LOCATION: LAT 53 09 10 N LONG 117 13 55 W
DRAINAGE AREA: 17.1 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-OCT STANDARD ERROR OF MEAN %
1967	--------PP--	MANUAL	2 OCT 4	0 SEP 20 *	--- ---	---	---	---	---
1968	----PCCCCC--	MANUAL	79 JUN 30	1 SEP 10	4.2JUN 30	54.2	---	---	---
1969	----CCCCCC--	MANUAL	869 AUG 5 *	0 SEP 27	125 AUG 5	572 *	---	---	---
1970	----CCCCCC--	MANUAL	145 JUN 16	0 OCT 5	20.8JUN 16	71.7	---	---	---
1971	---CCCCCCC--	MANUAL	142 JUN 8	0 APR 1	64.9JUN 9	295	1.56	1.56	---
1972	----CCCCCC--	MANUAL	678 JUN 25	0 AUG 8	68.6JUN 25	220	---	---	---
1973	---CCCCCCCP-	MANUAL	401 JUN 24	0 APR 1	64.6MAY 16	411	2.23	1.89	17.8
1974	---CCCCCCC--	MANUAL	392 JUL 11	0 APR 1	6.8MAY 6	106	0.551	1.45	33.7
1975	---CCCCCCC--	MANUAL	179 MAY 9	0 APR 1	7.5MAY 9	36.0	0.194	1.13	41.1
1976	---CCCCCCC--	MANUAL	111 JUN 16	0 APR 1	5.1JUN 16	33.1	0.166	0.94	43.5
1977	--PCCCCCC--	MANUAL	408 MAY 11	0 SEP 13	41.6MAY 11	463	2.20	1.15	34.3
1978	---CCCCCCP-	MANUAL	257 MAY 16	1 SEP 1	45.1MAY 16	148	0.692	1.09	31.4
1979	----CCCC---	MANUAL	370 JUN 20	0 JUL 18	24.3JUN 20	52.6	---	---	---
1980	---CCCCC---	MANUAL	334 JUN 4	0 APR 1	202 JUN 4 *	531	---	---	---
1981	----CCCC---	MANUAL	73 MAY 15	0 SEP 17	3.8JUL 30	32.3	---	---	---
1982	---CCCCCCP-	MANUAL	662 JUL 4	1 APR 1	125 JUL 4	334	1.56	1.14	26.3
1983	---CCCCCCP-	MANUAL	120 JUN 24	1 APR 1	7.3JUN 24	29.3	0.137	1.03	27.9
1984	--PCCCCCC--	MANUAL	141 MAY 16	0 MAY 27	6.5JUN 8	19.5	0.101	0.94	29.1
1985	---CCCCCCC--	MANUAL	170 JUN 24	0 APR 16	6.5SEP 13	33.8	0.165	0.86	29.6
1986	----PCCCCC--	MANUAL	313 JUL 17	0 JUN 6	95.4JUL 17	291	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

FIDDLE RIVER ABOVE MORRIS CREEK - STATION NO. 07AA010

LOCATION: LAT 53 10 40 N LONG 117 49 53 W
DRAINAGE AREA: 203 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	-----P------	MANUAL	11 JUN 4	11 JUN 4 *	--- ---	---	---	---	---
1971	-----P------	MANUAL	6 720 JUN 5 *	21 JUN 16	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

FIREBAG RIVER NEAR THE MOUTH - STATION NO. 07DC001

LOCATION: LAT 57 38 30 N LONG 111 10 30 W
DRAINAGE AREA: 5 990 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 02	16:20	4.0	125	MID X	DH59	111 C	122														

NOTE: SINGLE VERTICAL LOCATED AT 1QRB (ONE QUARTER THE DISTANCE FROM THE RIGHT BANK) FOR 1990

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

FIREBAG RIVER NEAR THE MOUTH - STATION NO. 07DC001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	-----PP-P-P-	MANUAL	12	JUN 12			3	NOV 2			---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	71	APR 27			4	SEP 22			---	---	---	---	---	---
1978	---P-PPP-----	MANUAL	313	APR 29	*		7	JUL 5			---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	118	MAY 22			5	AUG 23			---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	49	APR 23			4	OCT 26			---	---	---	---	---	---
1981	----P-PP-----	MANUAL	32	JUL 15			2	AUG 30	*		---	---	---	---	---	---
1982	-----PP-PP---	MANUAL	45	MAY 18			5	JUN 23			---	---	---	---	---	---
1983	---P-P-PP----	MANUAL	64	APR 26			2	SEP 15			---	---	---	---	---	---
1984	----P--PPP---	MANUAL	35	AUG 11			4	OCT 3			---	---	---	---	---	---
1985	---P-P-P-----	MANUAL	241	APR 28			2	AUG 21			---	---	---	---	---	---
1986	----P--P-----	MANUAL	55	MAY 8			3	AUG 22			---	---	---	---	---	---
1987	----PP-P-----	MANUAL	44	MAY 1			2	AUG 26			---	---	---	---	---	---
1988	----PP--P----	MANUAL	67	MAY 3			7	JUN 20			---	---	---	---	---	---
1989	----PP-P-P---	MANUAL	169	MAY 5			4	OCT 26			---	---	---	---	---	---
1990	----P--------	MANUAL	111	MAY 2			111	MAY 2			---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

FISH CREEK NEAR PRIDDIS - STATION NO. 05BK001

LOCATION: LAT 50 53 10 N LONG 114 19 35 W
DRAINAGE AREA: 259 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	----P-P------	MANUAL	215	JUL 1			0	MAY 20			---	---	---	---	---	---
1971	----PP-------	MANUAL	1 450	JUN 6	*		36	JUN 2			---	---	---	---	---	---
1972	--PPPP------	MANUAL	107	APR 6			1	MAY 17	*		---	---	---	---	---	---
1976	----P---P----	MANUAL	15	SEP 24			1	MAY 13			---	---	---	---	---	---
1977	----P--------	MANUAL	15	MAY 17			15	MAY 17			---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

FLETCHER CHANNEL BELOW DIVERGENCE - STATION NO. 07DD004

LOCATION: LAT 58 27 55 N LONG 111 04 30 W
DRAINAGE AREA:
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PPPPPP-P	MANUAL	1 650	JUL 18			6	DEC 20	*		---	---	---	---	---	---
1972	---P--PP-----	MANUAL	1 180	JUL 5			6	APR 14			---	---	---	---	---	---
1973	-----PPPPP---	MANUAL	972	JUN 26			42	OCT 4			---	---	---	---	---	---
1974	-----PPPP----	MANUAL	398	JUN 26			22	SEP 30			---	---	---	---	---	---
1976	----PPPPPP--	MANUAL	1 230	AUG 30			49	JUL 8			---	---	---	---	---	---
1977	----PPPPPP--	MANUAL	781	MAY 20			57	OCT 4			---	---	---	---	---	---
1978	-----PPPPP--	MANUAL	720	SEP 12			78	AUG 21			---	---	---	---	---	---
1979	-----PPPPP--	MANUAL	435	JUL 11			52	SEP 5			---	---	---	---	---	---
1980	-----PPPPP--	MANUAL	3 230	JUN 12	*		76	OCT 7			---	---	---	---	---	---
1981	-----PPP-P--	MANUAL	236	JUL 31			12	OCT 2			---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

FORTY MILE CREEK NEAR BANFF - STATION NO. 05BB003

LOCATION: LAT 51 12 24 N LONG 115 35 05 W
DRAINAGE AREA: 133 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-AUG MEAN LOAD (TONNES)	SUMMARY : MAY-AUG HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-AUG STANDARD ERROR OF MEAN %
1972	----CCCCC---	MANUAL	150 JUN 1 *	0 AUG 8 *	219 JUN 1 *	1 290 *	10.9	10.9	---
1973	----CCCC----	MANUAL	43 JUN 24	1 AUG 3	46.4JUN 24	413	3.36	7.12	52.8

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

FREEMAN RIVER NEAR FORT ASSINIBOINE - STATION NO. 07AH001

LOCATION: LAT 54 21 52 N LONG 114 54 13 W
DRAINAGE AREA: 1 660 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	---.---P--P--	MANUAL	1 200 JUL 15	5 OCT 29	--- ---	---	---	---	---
1975	---PP-PPP---	MANUAL	781 APR 23	5 AUG 19	--- ---	---	---	---	---
1976	---PPPPP---	MANUAL	297 APR 21	6 JUN 23	--- ---	---	---	---	---
1977	---PPP-PP---	MANUAL	455 APR 18	5 AUG 23	--- ---	---	---	---	---
1978	---PPPPP-P-	MANUAL	853 JUN 16	10 AUG 30	--- ---	---	---	---	---
1979	----PPPPPP--	MANUAL	2 860 JUN 15 *	7 SEP 20	--- ---	---	---	---	---
1980	---PPPPPPP--	MANUAL	1 110 APR 16	9 OCT 16	--- ---	---	---	---	---
1981	---PPPPPPP--	MANUAL	285 APR 23	3 SEP 9	--- ---	---	---	---	---
1982	------PP-P-P-	MANUAL	114 JUL 8	5 JUN 24	--- ---	---	---	---	---
1983	-------PPP---	MANUAL	569 JUL 5	7 AUG 30	--- ---	---	---	---	---
1984	-----PPP-P---	MANUAL	2 340 JUN 6	7 SEP 5	--- ---	---	---	---	---
1985	----PPPPPP--	MANUAL	127 MAY 29	6 JUN 19	--- ---	---	---	---	---
1986	----PPPP--P-	MANUAL	641 MAY 7	2 AUG 28	--- ---	---	---	---	---
1987	----PPPPPP--	MANUAL	65 AUG 13	7 SEP 9	--- ---	---	---	---	---
1988	---PPPPPP-P-	MANUAL	2 460 JUL 9	1 SEP 28 *	--- ---	---	---	---	---
1989	---PPPPPP-P-	MANUAL	1 380 AUG 5	8 NOV 2	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

GOOSE ISLAND CHANNEL BELOW DIVERGENCE - STATION NO. 07DD005

LOCATION: LAT 58 28 15 N LONG 110 51 20 W
DRAINAGE AREA:
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----PPPPPP-P	MANUAL	1 780 JUN 16	6 DEC 21 *	--- ---	---	---	---	---
1972	---P--PP-----	MANUAL	927 JUL 7	6 APR 13	--- ---	---	---	---	---
1973	-----PPPPP---	MANUAL	896 JUN 26	46 OCT 3	--- ---	---	---	---	---
1974	-----PPPPP---	MANUAL	428 JUN 27	30 OCT 17	--- ---	---	---	---	---
1976	----PPPPPP--	MANUAL	816 AUG 30	44 JUN 8	--- ---	---	---	---	---
1977	----PPPPPP--	MANUAL	597 MAY 20	46 SEP 19	--- ---	---	---	---	---
1978	-----PPPPP---	MANUAL	565 SEP 12	85 AUG 21	--- ---	---	---	---	---
1979	-----PPPPP---	MANUAL	424 JUL 11	52 SEP 5	--- ---	---	---	---	---
1980	-----PPPPP---	MANUAL	3 220 JUN 12 *	81 OCT 7	--- ---	---	---	---	---
1981	-----PPP-P---	MANUAL	227 JUL 30	21 OCT 2	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HANGINGSTONE RIVER AT FORT MCMURRAY - STATION NO. 07CD004

LOCATION: LAT 56 42 18 N LONG 111 21 20 W
DRAINAGE AREA: 959 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1978	---PPP-PP---	MANUAL	2 890 APR 28 *		7 AUG 1		---	---	---	---	---	---
1979	----P-PPPP--	MANUAL	727 MAY 10		14 JUL 5		---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	189 SEP 17		6 MAY 24 *		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HARTLEY CREEK NEAR FORT MACKAY - STATION NO. 07DA009

LOCATION: LAT 57 15 34 N LONG 111 27 53 W
DRAINAGE AREA: 358 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 04	14:05	5.0	13.6	MID	DH59	68	117														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

HARTLEY CREEK NEAR FORT MACKAY - STATION NO. 07DA009

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PP-PPP-P-	MANUAL	58 APR 15		2 NOV 2		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	39 APR 21		2 SEP 22		---	---	---	---	---	---
1978	---PPPPP----	MANUAL	106 AUG 21 *		3 JUN 26		---	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	40 MAY 3		8 JUN 26		---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	54 SEP 18		5 MAY 25		---	---	---	---	---	---
1981	----P-PP----	MANUAL	12 AUG 29		4 MAY 28		---	---	---	---	---	---
1982	----PP-P----	MANUAL	19 MAY 19		1 AUG 3 *		---	---	---	---	---	---
1983	---P-P-PP---	MANUAL	7 APR 27		2 AUG 8		---	---	---	---	---	---
1984	----P--PP---	MANUAL	8 SEP 21		4 AUG 11		---	---	---	---	---	---
1985	---P-P-P----	MANUAL	89 APR 30		6 JUN 15		---	---	---	---	---	---
1986	----PP-P----	MANUAL	13 MAY 13		2 AUG 25		---	---	---	---	---	---
1987	----PP-P----	MANUAL	28 MAY 2		9 JUN 19		---	---	---	---	---	---
1988	----PP--P---	MANUAL	38 MAY 6		11 JUN 29		---	---	---	---	---	---
1989	----PP-P----	MANUAL	79 MAY 4		9 AUG 27		---	---	---	---	---	---
1990	----P-------	MANUAL	68 MAY 4		68 MAY 4		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER AT DIEBEL'S RANCH - STATION NO. 05BL019

LOCATION: LAT 50 24 20 N LONG 114 29 50 W
DRAINAGE AREA: 774 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	----P--------	MANUAL	4 MAY 21	4 MAY 21	--- ---	---	---	---	---
1971	----PP------	MANUAL	675 JUN 6 *	1 MAY 8	--- ---	---	---	---	---
1972	----PP------	MANUAL	554 JUN 2	1 MAY 3 *	--- ---	---	---	---	---
1976	----P--P----	MANUAL	13 MAY 13	4 AUG 4	--- ---	---	---	---	---
1977	----P--------	MANUAL	12 MAY 24	2 MAY 16	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER BELOW LITTLE BOW CANAL - STATION NO. 05BL004

LOCATION: LAT 50 35 08 N LONG 113 52 07 W
DRAINAGE AREA: 1 980 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUN 01	15:00	10.0	135	17.0	X	D49	703	174	11	17	31	40	59	75	89	98	100			25	58	17
JUN 05	11:15	6.5	102	17.0	X	D49	341	167	17	23	37	48	65	77	89	98	100			23	54	23
JUL 09	14:05	14.0	22.2	10.0	X	D49	17	183														
JUL 23	13:40	14.0	9.47	18.0	X	DH48	13	180														
AUG 15	14:20	17.0	8.60	20.0	K	DH48	7	213														
SEP 05	11:50	10.0	5.23	8.0	K	D49	7	238														
SEP 27	14:10	12.0	3.10	12.6	K	DH48	9	235														
OCT 18	08:40	4.0	4.12	12.0	X	DH48	27	202														
NOV 06	12:50	4.0	2.78	13.6	K	DH48	32	255														

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK
X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

HIGHWOOD RIVER BELOW LITTLE BOW CANAL - STATION NO. 05BL004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1990	-----PPPPPP-	MANUAL	703 JUN 1 *	7 AUG 15 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER BELOW PICKLEJAR CREEK - STATION NO. 05BL021

LOCATION: LAT 50 29 55 N LONG 114 49 02 W
DRAINAGE AREA: 132 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	372 JUN 5 *	17 JUN 2	--- ---	---	---	---	---
1976	----P--P----	MANUAL	19 MAY 13	3 AUG 4	--- ---	---	---	---	---
1977	----P--------	MANUAL	5 MAY 24	2 MAY 16 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER NEAR ALDERSYDE - STATION NO. 05BL009

LOCATION: LAT 50 41 58 N LONG 113 51 23 W
DRAINAGE AREA: 2 340 km²
TYPE OF FLOW: REGULATED SINCE 1910
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 01	09:45	10.0	136	10	RB X	D49	743	172	16	22	37	49	68	84	95	99	100			16	62	22
JUN 04	13:20	8.0	118	65.0	K	D49	515	203	20	24	40	51	68	79	90	97	100			21	55	24
JUN 14	09:08	8.0	49.2	31.0	K	D49	80	186														
JUN 27	12:00	13.0	46.4	56.0	X	DH59	50	173														
AUG 02	11:05	12.0	19.3	33.0	X	DH59	13	187														
AUG 29	15:20	15.0	7.93	26.6	X	DH59	76	206														
SEP 28	12:45	10.0	3.05	22.5	X	DH59	9	226														
OCT 31	10:50	3.0	3.78	22.5	X	DH59	49	191														

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL, FROM LEFT BANK
X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

HIGHWOOD RIVER NEAR ALDERSYDE - STATION NO. 05BL009

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)			SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1976	----P--PP---	MANUAL	89	MAY 14		1	AUG 3	*	---	---	---	---	---	---
1977	----P-------	MANUAL	3	MAY 17		3	MAY 17		---	---	---	---	---	---
1990	-----P-PPP--	MANUAL	743	JUN 1	*	9	SEP 28		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HIGHWOOD RIVER NEAR THE MOUTH - STATION NO. 05BL024

LOCATION: LAT 50 47 00 N LONG 113 49 13 W
DRAINAGE AREA: 3 990 km²
TYPE OF FLOW: REGULATED SINCE 1910
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 27	10:10	10.0	354	WE	RB X	DIP	2179															
JUN 01	08:17	10.0	214	10	RB X	D49	784	173	20	25	44	55	75	89	95	99	100			11	64	25
JUN 01	08:18	10.0	214	10	RB X	D49	770	168	22	25	46	55	74	88	94	98	100			12	63	25
JUN 01	08:19	10.0	214	10	RB X	D49	778	173	22	29	49	57	76	88	95	99	100			12	59	29
JUN 04	10:30	10.0	205	38	K	D49	619	198	18	28	46	60	78	90	95	99	100			10	62	28
JUN 14	11:25	10.0	73.6	40	K	D49	54	188														
JUN 20	11:05	11.0	69.5	30	K	D49	47	185														
JUN 27	09:20	13.0	66.1	30	K	DH59	36	168														
AUG 02	09:05	12.0	34.1	40	X	D49	18	193														
AUG 29	11:30	10.0	17.8	38	K	D49	10	226														
SEP 28	09:35	7.0	5.58	28.4	X	DH59	5	234														
OCT 31	13:15	3.0	5.82	26	K	DH59	12	110														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL, FROM LEFT BANK
X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

HIGHWOOD RIVER NEAR THE MOUTH - STATION NO. 05BL024

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1970	----CCCC----	MANUAL	11 300 JUN 14 *		0 AUG 24 *		254 000 JUN 14 *		380 000 *	---	---	---
1971	----------CCC	MANUAL	13 OCT 28		2 OCT 1		5.7 OCT 26		193	---	---	---
1972	CCCCCCCCCCCC	MANUAL	1 720 JUN 1		3 FEB 15		26 200 JUN 1		240 000	980	980	---
1973	CCCCCCCCCCCC	MANUAL	2 000 MAY 26		0 JAN 3		16 300 MAY 27		79 200	323	651	50.4
1974	CCCCCCCCCCCC	MANUAL	1 910 APR 30		0 SEP 3		25 800 JUN 17		320 000	1 320	874	33.5
1975	CCCCCCCCCCCC	MANUAL	3 950 JUN 20		0 SEP 26		75 900 JUN 20		218 000	929	887	23.3
1976	CCCCCCCCCCCC	MANUAL	495 AUG 6		0 DEC 5		7 610 AUG 6		30 400	124	735	30.1
1977	CCCCCCCCCCCC	MANUAL	700 APR 5		1 JUN 27		1 610 APR 5		5 590	22.3	616	35.1
1978	CCCCCCCCCCCC	MANUAL	1 020 JUN 5		2 SEP 16		13 400 JUN 6		102 000	415	587	31.5
1979	CCCCCCCCCP-	MANUAL	803 MAY 27		0 JUL 13		7 980 MAY 27		49 100	209	540	30.9
1980	--CCCCCCCP-	MANUAL	1 350 JUN 3		4 OCT 23		15 300 JUN 3		103 000	421	527	28.1
1981	--PPPP-PPP--	MANUAL	1 340 MAY 21		3 SEP 28		--- ---		---	---	---	---
1982	---PPPPPP---	MANUAL	170 JUN 14		3 JUL 28		--- ---		---	---	---	---
1983	---PPPPP----	MANUAL	135 MAY 26		2 AUG 30		--- ---		---	---	---	---
1984	----PP-PP---	MANUAL	37 MAY 30		3 MAY 2		--- ---		---	---	---	---
1985	----PPPPPP--	MANUAL	63 MAY 24		3 OCT 28		--- ---		---	---	---	---
1986	--P-PPPPP-P-	MANUAL	1 010 MAY 29		2 AUG 26		--- ---		---	---	---	---
1987	----PPPPPP--	MANUAL	84 JUL 22		2 SEP 9		--- ---		---	---	---	---
1988	----PPP-P-P-	MANUAL	11 JUN 3		1 JUL 28		--- ---		---	---	---	---
1989	---PPPPPP---	MANUAL	158 MAY 10		4 SEP 21		--- ---		---	---	---	---
1990	----PP-PPP--	MANUAL	2 180 MAY 27		5 SEP 28		--- ---		---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HORSE CREEK NEAR VALLEYVIEW - STATION NO. 07GF007

LOCATION: LAT 54 55 19 N LONG 117 48 47 W
DRAINAGE AREA: 4.27 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1970	---CCCCCCC--	MANUAL	33 APR 21		0 APR 1 *		0.7 APR 22		4.25	---	---	---
1971	--CCCCCCCC--	MANUAL	97 JUN 16		0 MAR 1		4.5 JUN 27		18.5	0.175	0.175	---
1972	--CCCCCCCC--	MANUAL	71 APR 15		0 MAR 1		1.6 APR 15		11.0	0.083	0.12	35.9
1973	--CCCCCCCP-	MANUAL	54 APR 23		0 MAR 1		0.9 APR 23		8.32	0.059	0.10	33.5
1974	--CCCCCCC--	MANUAL	62 APR 25		0 MAR 1		4.3 APR 23		32.*	0.441	0.18	46.2
1975	----PP------	MANUAL	4 MAY 30		4 MAY 30		--- ---		---	---	---	---
1978	-------PPP--	MANUAL	158 SEP 19		5 OCT 17		--- ---		---	---	---	---
1979	----PPPP----	MANUAL	301 MAY 17 *		12 JUL 6		--- ---		---	---	---	---
1980	---P-P--PPP-	MANUAL	210 APR 17		4 SEP 15		--- ---		---	---	---	---
1981	--PPPPP-----	MANUAL	79 JUL 20		4 MAY 11		--- ---		---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

IRON CREEK NEAR HARDISTY - STATION NO. 05FB002

LOCATION: LAT 52 42 28 N LONG 111 18 36 W
DRAINAGE AREA: 3 500 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	81 MAY 2 *		81 MAY 2 *		--- ---		---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

JACKFISH CREEK ABOVE ATHABASCA RIVER - STATION NO. 07DD009

LOCATION: LAT 58 24 30 N LONG 110 55 12 W
DRAINAGE AREA: 2 010 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)			SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1972	------PP----	MANUAL	37	JUL 5		15	JUL 19	*	---	---	---	---	---	---
1973	-----P-PPP--	MANUAL	468	JUN 7	*	15	JUN 26		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

JAMES RIVER NEAR SUNDRE - STATION NO. 05CA002

LOCATION: LAT 51 55 37 N LONG 114 41 04 W
DRAINAGE AREA: 821 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)			SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	----PPP-----	MANUAL	5 910	JUN 6	*	44	JUL 12		---	---	---	---	---	---
1972	---PPP------	MANUAL	228	MAY 18		10	JUN 3	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

JOSLYN CREEK NEAR FORT MACKAY - STATION NO. 07DA016

LOCATION: LAT 57 16 27 N LONG 111 44 30 W
DRAINAGE AREA: 257 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)			SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1976	---PP-PPP-P-	MANUAL	1 100	APR 15		37	NOV 4		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	142	MAY 4		11	SEP 19		---	---	---	---	---	---
1978	---PPPPPP---	MANUAL	2 360	MAY 1		13	AUG 22		---	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	544	MAY 30		19	OCT 17		---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	116	APR 24		6	JUN 24	*	---	---	---	---	---	---
1981	----P-PP----	MANUAL	254	MAY 26		8	AUG 29		---	---	---	---	---	---
1982	-----P-PP---	MANUAL	33	JUN 24		17	AUG 3		---	---	---	---	---	---
1983	---P-P-PP---	MANUAL	2 040	APR 26		17	SEP 14		---	---	---	---	---	---
1984	----P--PP---	MANUAL	154	MAY 22		49	SEP 22		---	---	---	---	---	---
1985	---P-P-P----	MANUAL	2 900	APR 29		23	AUG 20		---	---	---	---	---	---
1986	----PP-P----	MANUAL	2 510	MAY 7		39	AUG 21		---	---	---	---	---	---
1987	----PP------	MANUAL	596	MAY 2		111	JUN 17		---	---	---	---	---	---
1988	----PP--P----	MANUAL	1 490	MAY 5		59	SEP 14		---	---	---	---	---	---
1989	----PP-P-P--	MANUAL	3 940	MAY 2	*	24	AUG 26		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

JUMPINGPOUND CREEK NEAR THE MOUTH - STATION NO. 05BH009

LOCATION: LAT 51 09 16 N LONG 114 31 42 W
DRAINAGE AREA: 571 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1972	--PPPP------	MANUAL	123 APR 6 *	4 MAY 2 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

KANANASKIS RIVER ABOVE LOWER LAKE - STATION NO. 05BF002

LOCATION: LAT 50 37 20 N LONG 115 07 30 W
DRAINAGE AREA: 151 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	90 MAY 2 *	71 MAY 2 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

KEG RIVER AT HIGHWAY NO. 35 - STATION NO. 07HF002

LOCATION: LAT 57 44 40 N LONG 117 37 20 W
DRAINAGE AREA: 667 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	--------PP--	MANUAL	24 SEP 19	17 OCT 31	--- ---	---	---	---	---
1975	---PPPPPPP--	MANUAL	499 JUN 6	18 OCT 30	--- ---	---	---	---	---
1976	---PPPPPPP--	MANUAL	1 040 JUN 29	21 SEP 30	--- ---	---	---	---	---
1977	----PPP-PP--	MANUAL	809 JUN 13	23 OCT 25	--- ---	---	---	---	---
1978	----PPPP-P--	MANUAL	2 050 MAY 23	34 OCT 27	--- ---	---	---	---	---
1979	-----PPP--P-	MANUAL	3 650 JUN 28	16 NOV 2 *	--- ---	---	---	---	---
1980	---PP-PP----	MANUAL	164 APR 25	27 JUL 3	--- ---	---	---	---	---
1981	----PP-P----	MANUAL	738 MAY 4	27 JUN 29	--- ---	---	---	---	---
1982	----P--P-P--	MANUAL	401 MAY 6	16 OCT 25	--- ---	---	---	---	---
1983	----P-PPP---	MANUAL	111 MAY 6	40 AUG 11	--- ---	---	---	---	---
1984	----PPPPPP--	MANUAL	1 270 MAY 22	45 AUG 27	--- ---	---	---	---	---
1985	----PPPPP-P-	MANUAL	1 360 MAY 7	23 JUL 22	--- ---	---	---	---	---
1986	----PPPPPP--	MANUAL	1 570 JUN 23	36 OCT 27	--- ---	---	---	---	---
1987	----PPPPPP--	MANUAL	9 140 AUG 2 *	28 OCT 30	--- ---	---	---	---	---
1988	----PPPPP-P-	MANUAL	602 JUN 3	20 SEP 29	--- ---	---	---	---	---
1989	----PPPPPP-P-	MANUAL	1 520 JUN 2	23 SEP 28	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

LAKE CLAIRE NEAR OUTLET TO PRAIRIE RIVER - STATION NO. 07KF002

LOCATION: LAT 58 38 00 N LONG 111 41 50 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1975	-----PPPPP--	MANUAL	751 AUG 7 *	177 JUN 13 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

LEE CREEK AT BEAZER - STATION NO. 05AE037

LOCATION: LAT 49 06 45 N LONG 113 29 00 W
DRAINAGE AREA: 175 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1979	------PP----	MANUAL	20 JUL 31	2 AUG 13	--- ---	---	---	---	---
1981	-----PPPP---	MANUAL	109 JUN 11 *	83 SEP 2	--- ---	---	---	---	---
1982	-----PPP-P--	MANUAL	80 JUL 22	1 OCT 26 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

LEE CREEK AT CARDSTON - STATION NO. 05AE002

LOCATION: LAT 49 12 00 N LONG 113 17 45 W
DRAINAGE AREA: 307 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	5 170 MAY 6 *	267 JUN 2	--- ---	---	---	---	---
1972	--P-P-------	MANUAL	1 820 MAY 25	158 MAY 5 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

LESSER SLAVE LAKE AT SLAVE LAKE - STATION NO. 07BJ006

LOCATION: LAT 55 18 15 N LONG 114 46 18 W
DRAINAGE AREA: 13 600 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1980	------P-----	MANUAL	7 JUL 16 *	7 JUL 16 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 07BK006

LOCATION: LAT 55 17 39 N LONG 114 35 26 W
DRAINAGE AREA: 14 400 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1977	---PPPPPPP--	MANUAL	166 APR 12		31 JUL 19		---	---	---	---	---	---
1979	-----PP-P---	MANUAL	70 JUL 5		39 SEP 5		---	---	---	---	---	---
1980	---PPP-PPP--	MANUAL	77 APR 15		16 OCT 28		---	---	---	---	---	---
1981	--PCCCCCCC--	MANUAL	120 JUL 8		12 OCT 7		629 JUL 8		34 300	160	160	---
1982	-----P-P----	MANUAL	39 AUG 6		23 AUG 31		---	---	---	---	---	---
1983	---PCCCCCC--	MANUAL	478 JUN 26		14 MAY 8		4 070 JUN 26		88 800	---	---	---
1984	--PCCCCCCP--	MANUAL	523 JUN 8		16 MAR 22		4 030 JUN 8		72 500	---	---	---
1985	--PCCCCCCC--	MANUAL	434 JUN 25		17 MAR 26		2 260 JUN 25		62 700	292	226	29.2
1986	--PCCCCCCC--	MANUAL	1 130 JUL 18	*	17 APR 8		8 130 JUL 18	*	89 800	* 416	289	25.5
1987	---PCCCCCC--	MANUAL	80 MAY 12		11 JUL 24		441 JUN 2		23 800	---	---	---
1988	--PP-PPPP-P-	MANUAL	1 070 JUL 7		5 MAR 30	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

LESSER SLAVE RIVER AT SLAVE LAKE - STATION NO. 07BK001

LOCATION: LAT 55 18 19 N LONG 114 45 08 W
DRAINAGE AREA: 13 600 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)		SINGLE VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 11	14:05	4.0	32.2	H	40.0	DH59	6	139														
APR 19	13:30	6.0	34.5	H	40.0	DH59	6	134														
APR 30	15:10	5.0	41.1	H	40.0	DH59	9	123														
MAY 31	16:50	12.0	49.9		40.0	DH59	11	117														
JUN 27	17:20	18.0	61.2	H	40.0	DH59	69	116														
AUG 02	09:40	16.0	56.5	H	40.0	DH59	52	124														
AUG 29	15:20	16.0	43.0	H	40.0	DH59	15	119														
SEP 27	15:25	13.0	34.8	H	40.0	DH59	32	127														
OCT 29	15:35	2.0	27.8		40.0	DH59	45	133														

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

DISCHARGE SYMBOL(S): H - DAILY MEAN

LESSER SLAVE RIVER AT SLAVE LAKE - STATION NO. 07BK001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1978	---------P--	MANUAL	132 OCT 11	*	132 OCT 11		---	---	---	---	---	---
1981	----PPPPPP--	MANUAL	34 JUL 7		3 JUL 23	*	---	---	---	---	---	---
1990	---PPP-PPP--	MANUAL	69 JUN 27		6 APR 11		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

LETHBRIDGE NORTHERN IRRIGATION DISTRICT CANAL AT MENZAGHIES BRIDGE - STATION NO. 05AB016

LOCATION: LAT 49 43 39 N LONG 113 33 00 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1977	---PP-------	MANUAL	157	MAY 12 *	52	APR 13 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

LITTLE PADDLE RIVER NEAR MAYERTHORPE - STATION NO. 07BB005

LOCATION: LAT 53 57 51 N LONG 115 10 29 W
DRAINAGE AREA: 290 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUL 04	10:25	18.0	59.5	10.0 K	D49	1050	182	45	70	85	90	94	96	98	100				4	26	70

NOTE: SINGLE VERTICAL IS LOCATED AT 18.0 METRES FOR 1990
VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL, FROM LEFT BANK

LITTLE PADDLE RIVER NEAR MAYERTHORPE - STATION NO. 07BB005

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	---PPPP-----	MANUAL	487	JUL 11	12	MAY 15	---	---	---	---	---	---
1974	------PPPP--	MANUAL	94	JUL 14	11	SEP 25	---	---	---	---	---	---
1975	---PPPPPP---	MANUAL	154	APR 30	11	JUN 17	---	---	---	---	---	---
1976	---PPPPP----	MANUAL	372	APR 13	6	AUG 10 *	---	---	---	---	---	---
1977	---PPP-PP----	MANUAL	434	MAY 30	14	JUN 22	---	---	---	---	---	---
1978	---PPPPPPP---	MANUAL	1 080	JUN 15	17	OCT 30	---	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	595	APR 30	13	AUG 20	---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	705	APR 15	21	OCT 14	---	---	---	---	---	---
1981	----PPPPPP--	MANUAL	35	MAY 18	10	JUL 6	---	---	---	---	---	---
1982	-------PPPP--	MANUAL	513	JUL 5	19	AUG 31	---	---	---	---	---	---
1983	-----P-------	MANUAL	165	JUN 28	165	JUN 28	---	---	---	---	---	---
1984	-----P-------	MANUAL	512	JUN 9	512	JUN 9	---	---	---	---	---	---
1985	----PPPPPP--	MANUAL	49	AUG 15	14	SEP 12	---	---	---	---	---	---
1986	---PPPPP--P-	MANUAL	354	JUL 15	8	AUG 26	---	---	---	---	---	---
1987	---PPPPPP---	MANUAL	103	MAY 22	6	JUL 13	---	---	---	---	---	---
1988	---PPPPP----	MANUAL	728	JUL 7	8	MAY 19	---	---	---	---	---	---
1989	---PPPPP----	MANUAL	1 100	AUG 3 *	17	MAY 16	---	---	---	---	---	---
1990	------P-----	MANUAL	1 050	JUL 4	1 050	JUL 4	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

LITTLE RED DEER RIVER NEAR WATER VALLEY - STATION NO. 05CB002

LOCATION: LAT 51 30 41 N LONG 114 40 19 W
DRAINAGE AREA: 449 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----PP-----	MANUAL	1 430	JUN 6 *	3	JUL 12	---	---	---	---	---	---
1972	--PPPP------	MANUAL	40	APR 26	3	MAY 26 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

LITTLE SMOKY RIVER AT LITTLE SMOKY - STATION NO. 07GG002

LOCATION: LAT 54 44 24 N LONG 117 10 46 W
DRAINAGE AREA: 3 010 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	-----P------	MANUAL	2 JUN 10 *	2 JUN 10 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

LLOYD CREEK NEAR BLUFFTON - STATION NO. 05CC009

LOCATION: LAT 52 44 20 N LONG 114 08 50 W
DRAINAGE AREA: 241 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PPP-----	MANUAL	31 MAY 22 *	3 JUN 9 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

LOVETT RIVER NEAR THE MOUTH - STATION NO. 07BA003

LOCATION: LAT 52 59 50 N LONG 116 39 20 W
DRAINAGE AREA: 101 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PPPPPPP--	MANUAL	203 JUN 16	8 SEP 8	--- ---	---	---	---	---
1977	---PPPPPP---	MANUAL	124 MAY 9	19 JUL 12	--- ---	---	---	---	---
1978	----PPPPP-P-	MANUAL	16 JUN 21	4 SEP 27	--- ---	---	---	---	---
1979	----PPPPPP--	MANUAL	39 MAY 22	3 AUG 15	--- ---	---	---	---	---
1980	---PPPPP-P--	MANUAL	326 JUN 24	8 OCT 28	--- ---	---	---	---	---
1982	----PPPPPP--	MANUAL	960 JUL 6 *	9 SEP 21	--- ---	---	---	---	---
1986	----PPPPP---	MANUAL	415 JUL 21	6 AUG 27	--- ---	---	---	---	---
1987	---P-PP-PP--	MANUAL	24 OCT 7	6 SEP 2	--- ---	---	---	---	---
1988	---PP-PPPPP-	MANUAL	25 APR 27	1 NOV 1 *	--- ---	---	---	---	---
1989	----PPPPPP--	MANUAL	302 JUN 27	4 OCT 26	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MACKAY RIVER NEAR FORT MACKAY - STATION NO. 07DB001

LOCATION: LAT 57 12 38 N LONG 111 41 36 W
DRAINAGE AREA: 5 570 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1975	-----PP--P--	MANUAL	353 JUL 20		27 OCT 8		---	---	---	---	---	---
1976	---PP-PPP-P-	MANUAL	698 APR 10		7 AUG 6		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	157 APR 21		4 AUG 22		---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	714 MAY 2	*	4 AUG 22		---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	38 SEP 19		5 MAY 22		---	---	---	---	---	---
1981	----P-PP----	MANUAL	13 MAY 20		1 AUG 28	*	---	---	---	---	---	---
1982	----PP-PP---	MANUAL	62 MAY 24		1 SEP 16		---	---	---	---	---	---
1983	---P-P-PP---	MANUAL	108 APR 26		1 SEP 17		---	---	---	---	---	---
1984	----P--PP---	MANUAL	57 MAY 24		5 SEP 22		---	---	---	---	---	---
1985	---P-P-P----	MANUAL	290 APR 29		7 AUG 20		---	---	---	---	---	---
1986	----PP-P----	MANUAL	313 MAY 7		8 AUG 23		---	---	---	---	---	---
1987	----PP-P----	MANUAL	74 MAY 2		11 AUG 27		---	---	---	---	---	---
1988	----PPP-P---	MANUAL	316 JUL 20		66 SEP 14		---	---	---	---	---	---
1989	----PP-P-P--	MANUAL	539 JUN 22		9 AUG 26		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MAMAWI LAKE CHANNEL AT DOG CAMP - STATION NO. 07KF010

LOCATION: LAT 58 38 50 N LONG 111 18 40 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----PPPPP--	MANUAL	2 810 JUL 21	*	20 OCT 12		---	---	---	---	---	---
1973	----P-P-----	MANUAL	335 MAY 15		96 JUL 18		---	---	---	---	---	---
1974	----P-------	MANUAL	321 MAY 22		321 MAY 22		---	---	---	---	---	---
1976	----PPPPPP--	MANUAL	1 660 JUL 9		25 AUG 3		---	---	---	---	---	---
1977	----PPPPPP--	MANUAL	1 330 JUN 15		16 AUG 8		---	---	---	---	---	---
1979	-----PPPP---	MANUAL	145 JUN 21		18 AUG 16		---	---	---	---	---	---
1980	-----PPPPP--	MANUAL	371 JUN 18		13 JUL 14	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MAMAWI LAKE CHANNEL AT OLD DOG CAMP - STATION NO. 07KF003

LOCATION: LAT 58 38 00 N LONG 111 20 00 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1975	-----PPPPP--	MANUAL	961 SEP 8	*	110 JUL 15		---	---	---	---	---	---
1978	-----PPPPP--	MANUAL	323 JUL 11		22 AUG 21		---	---	---	---	---	---
1981	-----PPPPP--	MANUAL	188 JUL 10		16 JUL 24	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MANYBERRIES CREEK AT BRODIN'S FARM - STATION NO. 05AF010

LOCATION: LAT 49 21 30 N LONG 110 43 30 W
DRAINAGE AREA: 339 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	17 MAY 9 *	17 MAY 9 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

MARMOT CREEK MAIN STEM NEAR SEEBE - STATION NO. 05BF016

LOCATION: LAT 50 57 01 N LONG 115 09 08 W
DRAINAGE AREA: 9.4 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1963	----PCCCCCCC	MANUAL	125 NOV 27	1 MAY 16	12.4JUN 30	43.5	---	---	---
1964	CCCCCCCCCCCC	MANUAL	270 JUN 8 *	0 SEP 22 *	45.5JUN 8 *	133 *	0.531	0.531	---
1965	CCCCCCCCCCCC	MANUAL	95 MAR 11	0 MAY 21	5.7JUN 18	38.7	0.179	0.35	49.6
1966	CCCCCCCCCCCC	MANUAL	25 MAR 30	1 JUL 24	0.6MAY 9	10.0	0.062	0.25	54.8
1967	CCCCCCCCCCCC	MANUAL	25 MAY 30	0 MAR 24	1.5MAY 30	13.8	0.191	0.24	42.0
1968	CCCCCCCCCCCC	MANUAL	9 JUN 28	0 JUL 27	0.4JUN 11	10.8	0.062	0.20	42.0
1969	CCCCCCCCCCCC	MANUAL	39 JUN 29	0 JAN 30	3.5JUN 29	28.3	0.196	0.20	34.6
1970	CCCCCCCCCCCC	MANUAL	25 MAY 5	0 JAN 1	1.7JUN 16	15.5	0.066	0.18	34.1
1971	CCCCCCCCCCCC	MANUAL	106 JUN 5	0 JAN 1	18.6JUN 6	60.4	0.350	0.20	28.4
1972	CCCCCCCCCCCC		28 JUN 10	0 FEB 4	3.5JUN 10	23.8	0.169	0.20	25.6
1973	CCCCCCCCCCCC		17 JUN 7	0 JAN 1	1.4JUN 7	16.3	0.066	0.18	25.6
1974	CCCCCCCCCCCC		44 JUN 17	0 JAN 1	7.4JUN 17	35.3	0.143	0.18	23.7
1975	CCCCCCCCCCCC		7 JUN 2	0 JAN 1	0.2JUN 24	6.86	0.036	0.17	24.3
1976	CCCCCCCCCCCC		7 JUL 1	0 FEB 5	0.3JUL 1	7.82	0.042	0.16	24.5
1977	CCCCCCCCCCCC		12 JUN 1	0 JAN 10	0.3JUN 1	6.88	0.030	0.15	24.9
1978	CCCCCCCCCCCC		23 JUN 6	0 MAY 31	2.0JUN 6	15.0	0.059	0.14	24.5
1979	CCCCCCCCCP-		13 MAY 26	0 JAN 11	0.6MAY 26	3.72	0.026	0.13	24.8
1980	--CCCCCCC--	MANUAL	12 SEP 17	0 MAR 1	0.6JUN 11	14.6	0.082	0.13	24.0
1981	---CCCCCC--	MANUAL	18 MAY 17	0 APR 1	2.0MAY 26	21.2	---	---	---
1982	---CCCCCC--	MANUAL	22 JUN 15	0 APR 1	1.8JUN 15	10.6	---	---	---
1983	----PCCCC---	MANUAL	3 JUL 12	0 AUG 17	0.1MAY 29	3.06	---	---	---

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

MCLEOD RIVER ABOVE EMBARRAS RIVER - STATION NO. 07AF002

LOCATION: LAT 53 28 12 N LONG 116 37 45 W
DRAINAGE AREA: 2 560 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 28	15:50	14.0	107	42.0 K	DH59	258	143														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990
VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK

ALBERTA

MCLEOD RIVER ABOVE EMBARRAS RIVER - STATION NO. 07AF002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PPPPPP---	MANUAL	19 AUG 25		3 SEP 22		---	---	---	---	---	---
1977	-----PPP----	MANUAL	30 JUN 22		7 JUL 20		---	---	---	---	---	---
1978	----PPPP----	MANUAL	108 JUN 5		3 AUG 23		---	---	---	---	---	---
1979	----PPPPP---	MANUAL	85 MAY 16		0 AUG 15	*	---	---	---	---	---	---
1980	---PPP-P----	MANUAL	692 JUN 3		11 MAY 5		---	---	---	---	---	---
1981	----PPPP----	MANUAL	113 MAY 11		3 JUL 8		---	---	---	---	---	---
1982	----PPPPPP--	MANUAL	200 MAY 4		5 OCT 27		---	---	---	---	---	---
1983	----PPPPPP--	MANUAL	26 MAY 10		1 SEP 20		---	---	---	---	---	---
1984	---PPPPPP---	MANUAL	38 SEP 24		5 AUG 21		---	---	---	---	---	---
1985	-------PPP--	MANUAL	5 AUG 12		3 SEP 9		---	---	---	---	---	---
1986	----P-P-PP--	MANUAL	1 940 JUL 19	*	3 SEP 9		---	---	---	---	---	---
1987	----PPPPPP--	MANUAL	77 AUG 11		1 OCT 27		---	---	---	---	---	---
1988	---PPPPPPP--	MANUAL	101 APR 19		3 OCT 31		---	---	---	---	---	---
1989	---PPPPPPP--	MANUAL	251 AUG 21		7 SEP 26		---	---	---	---	---	---
1990	----P-------	MANUAL	258 MAY 28		258 MAY 28		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

MCLEOD RIVER NEAR WHITECOURT - STATION NO. 07AG004

LOCATION: LAT 54 00 46 N LONG 115 50 18 W
DRAINAGE AREA: 9 100 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PPPPPP---	MANUAL	27 APR 21		3 SEP 22		---	---	---	---	---	---
1977	---PPP-PP---	MANUAL	1 240 MAY 31		12 APR 20		---	---	---	---	---	---
1978	---PPPPPPP--	MANUAL	878 JUN 16		3 AUG 29		---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	267 MAY 1		0 AUG 22	*	---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	1 850 JUN 7	*	5 OCT 15		---	---	---	---	---	---
1981	---PPPPPPP--	MANUAL	32 MAY 19		3 SEP 8		---	---	---	---	---	---
1982	------PP-P----	MANUAL	1 470 JUL 7		5 JUN 22		---	---	---	---	---	---
1983	------PPPP----	MANUAL	115 JUL 6		2 AUG 31		---	---	---	---	---	---
1984	----P-P------	MANUAL	300 MAY 2		54 JUL 24		---	---	---	---	---	---
1985	------PPPPP--	MANUAL	18 AUG 13		4 JUL 16		---	---	---	---	---	---
1986	----PPPP--P-	MANUAL	157 MAY 7		2 AUG 28		---	---	---	---	---	---
1987	---PP-PP-P---	MANUAL	39 AUG 12		4 OCT 7		---	---	---	---	---	---
1988	----PPPPP-P-	MANUAL	131 JUN 14		4 AUG 16		---	---	---	---	---	---
1989	---PPPPPPP--	MANUAL	311 AUG 23		3 OCT 31		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

MCLEOD RIVER NEAR WOLF CREEK - STATION NO. 07AG001

LOCATION: LAT 53 39 15 N LONG 116 16 50 W
DRAINAGE AREA: 6 310 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	----P-------	MANUAL	11 MAY 28	*	11 MAY 28	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

MEADOW CREEK NEAR THE MOUTH - STATION NO. 05AB029

LOCATION: LAT 49 57 15 N LONG 113 39 43 W
DRAINAGE AREA: 130 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	169 MAY 24 *	98 MAY 8 *	---	---	---	---	---	---
1972	--P-PP------	MANUAL	6 110 JUN 10 *	79 MAY 5 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MICHICHI CREEK AT DRUMHELLER - STATION NO. 05CE020

LOCATION: LAT 51 28 17 N LONG 112 42 59 W
DRAINAGE AREA: 1 140 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1978	-----P------	MANUAL	11 600 JUN 7 *	11 600 JUN 7 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MIDDLE FORK CREEK IN CIRQUE NEAR SEEBE - STATION NO. 05BF020

LOCATION: LAT 50 57 30 N LONG 115 11 56 W
DRAINAGE AREA: 1.17 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1978	-------P----	MANUAL	3 AUG 28 *	3 AUG 28 *	---	---	---	---	---	---
1979	-----PPPP---	MANUAL	6 AUG 30 *	1 JUL 6 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MIDDLE FORK CREEK NEAR SEEBE - STATION NO. 05BF017

LOCATION: LAT 50 57 34 N LONG 115 10 16 W
DRAINAGE AREA: 2.85 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1969	CCCCCCCCCCCC	MANUAL	31 APR 8	0 JAN 1 *	0.5MAY 25	7.63	0.072	0.072	---
1970	CCCCCCCCCCCC	MANUAL	33 JUN 4	0 JAN 1	0.7JUN 17	8.08	0.071	0.07	0.4
1971	CCCCCCCCCCCC	MANUAL	16 JUN 6	0 JAN 1	0.8JUN 6	5.61	0.051	0.06	10.4
1972	CCCCCCCCCCCC	MANUAL	33 JUN 1	0 JAN 1	1.3JUN 1	10.5	0.067	0.06	7.3
1973	CCCCCCCCCCCC	MANUAL	17 JUN 22	0 JAN 1	0.5JUN 23	5.59	0.059	0.06	6.2
1974	CCCCCCCCCCCC	MANUAL	90 JUN 17	0 JAN 1	5.4JUN 17 *	22.*	0.118	0.07	13.0
1975	C---CCCCCCCC	MANUAL	5 JUN 23	0 JAN 1	0.1JUN 24	1.49	---	---	---
1976	CCCCCCCCCCCC	MANUAL	6 JUN 16	0 JAN 1	0.1JUN 20	3.38	0.019	0.06	17.0
1977	CCCCCCCCCCCC	MANUAL	11 AUG 14	0 JAN 1	0.0AUG 14	1.31	0.008	0.05	20.6
1978	---CCCCCCCCC	MANUAL	30 JUN 6	0 APR 1	1.0JUN 6	8.49	---	---	---
1979	CCCCCCCCCP-	MANUAL	22 MAY 26	0 JAN 1	0.5MAY 26	2.89	0.020	0.05	21.1
1980	--CCCCCCC--	MANUAL	27 SEP 17	0 MAR 1	0.5JUN 11	5.39	0.034	0.05	20.0
1981	---CCCCCC--	MANUAL	29 MAY 26	0 APR 1	1.3MAY 26	10.5	---	---	---
1982	----CCCCC---	MANUAL	47 JUN 13	0 JUL 25	1.4JUN 13	7.20	---	---	---
1983	----PCCCC---	MANUAL	4 MAY 25	1 MAY 20	0.0MAY 29	1.98	---	---	---
1986	----P-------	MANUAL	396 MAY 28 *	332 MAY 28	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MIDDLE STREETER CREEK NEAR NANTON - STATION NO. 05AB023

LOCATION: LAT 50 06 31 N LONG 114 03 00 W
DRAINAGE AREA: 0.91 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1965	-----CCCCCCC	MANUAL	29 JUN 19 *	0 JUN 1 *	0.0JUN 20	0.461	---	---	---
1966	CCCCCCCCCCCC	MANUAL	47 JUN 6 *	0 JAN 1	0.1JUN 6 *	0.800	0.012	0.012	---
1967	CCCCCCCCC---	MANUAL	35 JUN 2	0 JAN 1	0.2JUN 2 *	2.*	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY - STATION NO. 11AA031

LOCATION: LAT 48 59 03 N LONG 110 28 10 W
DRAINAGE AREA: 6 490 km²
TYPE OF FLOW: REGULATED SINCE 1917
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-SEP MEAN LOAD (TONNES)	SUMMARY : MAY-SEP HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-SEP STANDARD ERROR OF MEAN %
1974	---PPPPPP---	MANUAL	6 460 MAY 16	659 MAY 30	--- ---	---	---	---	---
1975	---PCCCC---	MANUAL	12 200 JUN 23 *	246 SEP 15	174 000 JUN 23 *	1 730 000 *	9 600	9 600	---
1976	--PPPPP----	MANUAL	2 580 MAR 26	675 APR 19	--- ---	---	---	---	---
1981	--CCCCCCC--	MANUAL	7 460 MAY 7	40 OCT 30	29 700 MAY 18	612 000	3 240	6 420	49.5
1982	---PCCCCC--	MANUAL	6 040 MAY 29	12 SEP 13 *	21 400 MAY 29	305 000	1 820	4 890	48.9

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MILK RIVER AT HIGHWAY NO. 880 - STATION NO. 11AA036

LOCATION: LAT 49 08 44 N LONG 111 18 19 W
DRAINAGE AREA: 4 990 km²
TYPE OF FLOW: REGULATED SINCE 1916
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1981	-------P----	MANUAL	196 AUG 26	*	196 AUG 26	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

MILK RIVER AT MILK RIVER - STATION NO. 11AA005

LOCATION: LAT 49 08 37 N LONG 112 04 44 W
DRAINAGE AREA: 2 720 km²
TYPE OF FLOW: REGULATED SINCE 1916
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1974	----PPPPPP--	MANUAL	562 MAY 8		3 OCT 17		---	---	---	---	---	---
1975	-PPPPPPPPP--	MANUAL	5 130 JUN 21	*	6 APR 15		---	---	---	---	---	---
1976	--PPPPPPPP--	MANUAL	756 MAY 11		14 OCT 13		---	---	---	---	---	---
1981	--CCCCCCCCP-	MANUAL	903 MAR 17		7 NOV 2		3 890 MAY 17		90 500	369	369	---
1982	--CCCCCCCCP-	MANUAL	4 520 APR 14		6 APR 9		39 400 APR 14		129 000 *	526	448	17.5
1983	--PPPPPPPP--	MANUAL	3 300 JUN 15		5 SEP 13		---	---	---	---	---	---
1984	--PPPP-P-P--	MANUAL	434 MAY 30		5 OCT 31		---	---	---	---	---	---
1985	--PPPPPP-PP-	MANUAL	1 460 APR 3		5 NOV 5		---	---	---	---	---	---
1986	--PPPPPPPP--	MANUAL	296 JUN 24		4 SEP 29		---	---	---	---	---	---
1987	--PPPPP-PP--	MANUAL	759 APR 7		6 SEP 29		---	---	---	---	---	---
1988	--PPPP-PP-P-	MANUAL	496 APR 13		1 NOV 1	*	---	---	---	---	---	---
1989	---PPPPPPPP-	MANUAL	3 270 JUN 12		26 SEP 26		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

MILK RIVER AT WESTERN CROSSING OF INTERNATIONAL BOUNDARY - STATION NO. 11AA025

LOCATION: LAT 49 00 27 N LONG 112 32 42 W
DRAINAGE AREA: 1 050 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	----PPPPPP--	MANUAL	86 MAY 7		8 OCT 17		---	---	---	---	---	---
1975	-PPPPPPPPP--	MANUAL	5 230 JUN 20	*	7 MAR 19		---	---	---	---	---	---
1976	--PPPPPPPP--	MANUAL	141 APR 13		21 OCT 13		---	---	---	---	---	---
1981	--PPPPPPPPP-	MANUAL	1 010 MAY 21		5 APR 14		---	---	---	---	---	---
1982	--PPPPPPPPP-	MANUAL	1 120 APR 14		3 JUN 21	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

MILK RIVER NEAR PENDANT D'OREILLE - STATION NO. 11AA035

LOCATION: LAT 49 07 25 N LONG 110 52 15 W
DRAINAGE AREA: 6 040 km²
TYPE OF FLOW: REGULATED SINCE 1916
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1981	---PPPPPPPP-	MANUAL	2 680 JUN 17 *	10 NOV 3	--- ---	---	---	---	---
1982	---PPPPPPPP-	MANUAL	1 900 JUN 3	5 AUG 29 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MILK RIVER NEAR WRITING-ON-STONE PARK - STATION NO. 11AA034

LOCATION: LAT 49 05 18 N LONG 111 32 05 W
DRAINAGE AREA: 4 390 km²
TYPE OF FLOW: REGULATED SINCE 1916
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1981	---PPPPPPPP-	MANUAL	1 210 MAY 20 *	15 NOV 3	--- ---	---	---	---	---
1982	---PPPPPPPP-	MANUAL	723 MAY 11	4 SEP 8 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MILL CREEK NEAR THE MOUTH - STATION NO. 05AA011

LOCATION: LAT 49 28 10 N LONG 114 08 00 W
DRAINAGE AREA: 179 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	411 MAY 6	1 MAY 4 *	--- ---	---	---	---	---
1972	--P-PP------	MANUAL	537 JUN 1 *	17 MAR 24	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MISTAYA RIVER NEAR SASKATCHEWAN CROSSING - STATION NO. 05DA007

LOCATION: LAT 51 53 04 N LONG 116 41 17 W
DRAINAGE AREA: 249 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	16 MAY 12 *	16 MAY 12 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MUSKEG RIVER NEAR FORT MACKAY - STATION NO. 07DA008

LOCATION: LAT 57 11 30 N LONG 111 34 05 W
DRAINAGE AREA: 1 460 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 04	12:05	5.0	43.5	MID X	DH59	10	140														

NOTE: SINGLE VERTICAL LOCATED AT 1QLB (ONE QUARTER THE DISTANCE FROM THE LEFT BANK) FOR 1990
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

MUSKEG RIVER NEAR FORT MACKAY - STATION NO. 07DA008

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)			SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1976	---PP-PPP-P-	MANUAL	41	APR 11		3	AUG 3	*	---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	28	APR 20		3	AUG 25		---	---	---	---	---	---
1978	---PPPPPP---	MANUAL	15	APR 24		3	JUN 26		---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	13	MAY 2		5	MAY 30		---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	18	APR 24		5	OCT 25		---	---	---	---	---	---
1981	----P-PP----	MANUAL	8	JUL 15		3	MAY 27		---	---	---	---	---	---
1982	----PP-PP----	MANUAL	8	MAY 19		4	JUN 25		---	---	---	---	---	---
1983	----P-P-P----	MANUAL	11	APR 27		5	AUG 7		---	---	---	---	---	---
1984	----P--PP----	MANUAL	56	SEP 21	*	5	AUG 11		---	---	---	---	---	---
1985	---P-P-P-----	MANUAL	20	APR 30		6	AUG 21		---	---	---	---	---	---
1986	----PP-P-----	MANUAL	10	MAY 9		3	AUG 23		---	---	---	---	---	---
1987	----PP-P-----	MANUAL	7	MAY 3		4	JUN 19		---	---	---	---	---	---
1988	----PP--P----	MANUAL	13	MAY 6		7	JUN 29		---	---	---	---	---	---
1989	----PP-P-P---	MANUAL	49	MAY 4		4	AUG 27		---	---	---	---	---	---
1990	----P--------	MANUAL	10	MAY 4		10	MAY 4		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

NORTH FORK MILK RIVER ABOVE ST. MARY CANAL - STATION NO. 11AA032

LOCATION: LAT 48 58 15 N LONG 113 03 19 W
DRAINAGE AREA: 156 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)			SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	----PPPPPP--	MANUAL	32	JUN 11		2	OCT 16	*	---	---	---	---	---	---
1975	---PPPPPPP--	MANUAL	323	JUN 20	*	6	SEP 17		---	---	---	---	---	---
1976	--PPPPPPP--	MANUAL	69	MAR 31		2	OCT 14		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

NORTH MILK RIVER NEAR INTERNATIONAL BOUNDARY - STATION NO. 11AA001

LOCATION: LAT 49 01 19 N LONG 112 58 16 W
DRAINAGE AREA: 238 km²
TYPE OF FLOW: REGULATED SINCE 1916
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-SEP MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	-----PPPPPP--	MANUAL	82 MAY 7		10 SEP 26		---	---	---	---	---	---
1975	-PPCCCCCC---	MANUAL	1 450 JUN 20 *		9 JUL 1		5 250 JUN 20 *		18 900 *	103	103	---
1976	--PCCCCCCC--	MANUAL	445 MAY 8		10 SEP 8		684 MAY 8		17 300	92.6	98.0	5.4
1981	--CCCCCCCCP-	MANUAL	159 MAR 23		4 OCT 11		264 JUN 14		12 700	50.6	82.2	19.6
1982	--PPPPPPPPP-	MANUAL	139 MAY 19		2 AUG 9 *		--- ---		---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NORTH SASKATCHEWAN RIVER AT EDMONTON - STATION NO. 05DF001

LOCATION: LAT 53 32 15 N LONG 113 29 04 W
DRAINAGE AREA: 28 000 km²
TYPE OF FLOW: REGULATED SINCE 1960
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 05	09:20	12.0	2060	116	D49	2430	187	23	29	47	59	77	88	92	97	100			12	59	29

NOTE: SINGLE VERTICAL IS LOCATED AT 116 METRES FOR 1990

NORTH SASKATCHEWAN RIVER AT EDMONTON - STATION NO. 05DF001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	------P------	MANUAL	1 580 JUL 13		220 JUL 16		--- ---		---	---	---	---
1975	----P-PPP---	MANUAL	97 MAY 16		3 SEP 23 *		--- ---		---	---	---	---
1976	---P-PP------	MANUAL	143 APR 5		34 JUL 22		--- ---		---	---	---	---
1977	----PPP-P----	MANUAL	2 460 MAY 30 *		25 SEP 29		--- ---		---	---	---	---
1978	---PPPPPP-P-	MANUAL	777 JUN 8		7 AUG 31		--- ---		---	---	---	---
1979	---PPPPPP-P-	MANUAL	400 APR 27		7 AUG 23		--- ---		---	---	---	---
1980	-----PPPP----	MANUAL	142 JUN 2		28 SEP 26		--- ---		---	---	---	---
1981	----PP-------	MANUAL	267 MAY 28		64 MAY 7		--- ---		---	---	---	---
1982	----PPPPPP---	MANUAL	1 980 JUL 7		11 AUG 10		--- ---		---	---	---	---
1983	---P-PPPP-P--	MANUAL	396 APR 28		8 AUG 31		--- ---		---	---	---	---
1984	---PPPPP-P---	MANUAL	251 JUN 13		6 OCT 3		--- ---		---	---	---	---
1985	---PP--PP----	MANUAL	214 APR 7		11 AUG 6		--- ---		---	---	---	---
1986	---PPPPPPPP--	MANUAL	254 APR 15		8 SEP 16		--- ---		---	---	---	---
1987	---PPPPP-P---	MANUAL	239 APR 13		8 NOV 4		--- ---		---	---	---	---
1988	---PPPPP-P---	MANUAL	56 AUG 22		9 MAY 5		--- ---		---	---	---	---
1989	---PP-PPPPP--	MANUAL	634 AUG 19		12 NOV 6		--- ---		---	---	---	---
1990	------P------	MANUAL	2 430 JUL 5		2 430 JUL 5		--- ---		---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NORTH SASKATCHEWAN RIVER AT SAUNDERS - STATION NO. 05DC002

LOCATION: LAT 52 27 10 N LONG 115 45 20 W
DRAINAGE AREA: 5 160 km²
TYPE OF FLOW: REGULATED SINCE 1972
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1975	-----PP-PPP-	MANUAL	24 NOV 4	3 JUL 22 *	--- ---	---	---	---	---
1976	---PPPPPP--	MANUAL	34 JUL 13	5 APR 27	--- ---	---	---	---	---
1977	---PPP-PP---	MANUAL	28 JUN 16	4 SEP 12	--- ---	---	---	---	---
1978	---P-PPPPP--	MANUAL	111 JUN 1 *	3 AUG 29	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT - STATION NO. 05DA009

LOCATION: LAT 52 00 06 N LONG 116 28 10 W
DRAINAGE AREA: 1 920 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUN 26	14:00	10.0	219	9.0	D49	129	99														

NOTE: SINGLE VERTICAL IS LOCATED AT 9.0 METRES FOR 1990

NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT - STATION NO. 05DA009

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1972	-----CCCCCCCC		643 JUN 11	4 DEC 31	20 300 JUN 11 *	257 000	---	---	---
1973	CCCCCCCCCCCC		929 MAY 19	0 NOV 16 *	20 200 JUN 24	278 000 *	1 300	1 300	---
1974	CCCCCCCCCCCC		580 JUL 16	0 JAN 1	13 400 JUN 17	258 000	1 210	1 250	3.6
1975	CCCCCCCCCCCC		570 JUL 13	0 JAN 9	14 100 JUL 13	250 000	1 180	1 230	2.8
1976	CCCCPCCCCCCC		272 AUG 4	1 JAN 1	5 640 AUG 4	166 000	---	---	---
1977	CCCCCCCCCCCC	MANUAL	608 JUN 8	1 NOV 13	10 000 JUN 8	137 000	637	1 080	13.9
1978	CCCCCCCCCCCC	MANUAL	466 SEP 4	1 JAN 4	9 090 JUL 27	260 000	1 220	1 110	10.8
1979	P--CCCCCCP-	MANUAL	973 MAY 27 *	2 JAN 15	10 300 MAY 27	228 000	1 060	1 100	8.9
1980	----CCCCCC---	MANUAL	794 JUL 23	5 SEP 27	15 100 JUL 23	209 000	---	---	---
1981	-----CCCCCC--	MANUAL	437 JUL 29	4 MAY 6	10 800 JUL 29	257 000	---	---	---
1982	------PPPPP--	MANUAL	128 JUL 27	7 OCT 19	--- ---	---	---	---	---
1983	----PPPPPP---	MANUAL	241 MAY 31	2 OCT 18	--- ---	---	---	---	---
1984	---PPPPP----	MANUAL	236 JUL 31	0 APR 30	--- ---	---	---	---	---
1985	-----PP-PP---	MANUAL	154 AUG 1	13 SEP 26	--- ---	---	---	---	---
1986	------PPP-----	MANUAL	290 JUN 19	17 JUL 31	--- ---	---	---	---	---
1987	-----PPPPP----	MANUAL	172 JUL 30	32 AUG 27	--- ---	---	---	---	---
1988	-----PPPPP-P--	MANUAL	274 JUL 27	7 SEP 27	--- ---	---	---	---	---
1989	-----PPPPP----	MANUAL	148 JUL 19	15 SEP 12	--- ---	---	---	---	---
1990	-----P------	MANUAL	129 JUN 26	129 JUN 26	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NORTH SASKATCHEWAN RIVER NEAR ROCKY MOUNTAIN HOUSE - STATION NO. 05DC001

LOCATION: LAT 52 22 51 N LONG 114 56 21 W
DRAINAGE AREA: 11 000 km²
TYPE OF FLOW: REGULATED SINCE 1972
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-OCT MEAN LOAD (TONNES)	SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-OCT STANDARD ERROR OF MEAN %
1970	------P-----	MANUAL	156	JUL 16	156	JUL 16	---	---	---	---	---	---
1971	---PCCCCCCCC	MANUAL	3 150	JUN 6	1	NOV 6	200 000	JUN 6	1 020 000	5 510	5 510	---
1972	CCCCCCCCCCCC	MANUAL	6 840	JUN 25 *	0	FEB 22 *	693 000	JUN 25 *	2 460 000 *	13 300	9 430	41.5
1973	PPPPCCCCCC--	MANUAL	1 670	MAY 17	1	FEB 27	40 000	MAY 18	364 000	1 920	6 930	48.7

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NOTIKEWIN RIVER AT MANNING - STATION NO. 07HC001

LOCATION: LAT 56 55 10 N LONG 117 37 05 W
DRAINAGE AREA: 4 680 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
APR 26	10:00	3.0	136	28.0 K	DH59	2251	115	15	26	35	45	61	73	81	95	100			27	47	26

NOTE: SINGLE VERTICAL IS LOCATED AT 30 METRES FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK

NOTIKEWIN RIVER AT MANNING - STATION NO. 07HC001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	--------P-P-	MANUAL	61	SEP 18	6	NOV 1	---	---	---	---	---	---
1975	---PPPPPPP--	MANUAL	611	APR 28	4	AUG 11	---	---	---	---	---	---
1976	----PPPPP-P--	MANUAL	2 520	JUN 29	13	OCT 1	---	---	---	---	---	---
1977	----P-PP-PP--	MANUAL	291	APR 18	13	JUL 28	---	---	---	---	---	---
1978	-----P-PP-P--	MANUAL	3 400	MAY 25	6	AUG 31	---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	2 080	MAY 11	9	OCT 26	---	---	---	---	---	---
1980	---P--PPP---	MANUAL	163	SEP 26	16	SEP 2	---	---	---	---	---	---
1981	----PPPPPP--	MANUAL	94	MAY 25	9	OCT 26	---	---	---	---	---	---
1982	----PPPP----	MANUAL	1 850	MAY 3	2	JUL 23 *	---	---	---	---	---	---
1983	-----PP-PP---	MANUAL	3 680	JUN 21 *	7	SEP 1	---	---	---	---	---	---
1984	---PPP-P----	MANUAL	993	MAY 28	9	AUG 2	---	---	---	---	---	---
1985	-----PPPP-?--	MANUAL	830	MAY 8	3	AUG 27	---	---	---	---	---	---
1986	---PPPPPP---	MANUAL	2 910	MAY 6	3	SEP 24	---	---	---	---	---	---
1987	---PPPPP-P--	MANUAL	3 540	AUG 4	5	OCT 29	---	---	---	---	---	---
1988	-----PPPP---	MANUAL	56	AUG 24	7	SEP 28	---	---	---	---	---	---
1989	-----PPPPP---	MANUAL	3 120	MAY 2	17	JUL 27	---	---	---	---	---	---
1990	---P--------	MANUAL	2 250	APR 26	2 250	APR 26	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

OLDMAN RIVER NEAR BROCKET - STATION NO. 05AA024

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 49 33 27 N LONG 113 49 20 W
DRAINAGE AREA: 4 400 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 214 000 TONNES FOR THE PERIOD MAR 26 TO NOV 02

DAY	MAR DAILY DISCHARGE (m³/s)	MAR MEAN CONCENTRATION (mg/L)	MAR DAILY LOAD (t)	APR DAILY DISCHARGE (m³/s)	APR MEAN CONCENTRATION (mg/L)	APR DAILY LOAD (t)	MAY DAILY DISCHARGE (m³/s)	MAY MEAN CONCENTRATION (mg/L)	MAY DAILY LOAD (t)	DAY
1	10.4 B			19.2 B	25	41.5	64.5	32 S	178	1
2	10.6 B			21.6	24	44.6	69.6	39	235	2
3	10.8 B			30.0	29	75.2	75.6	61	398	3
4	11.0 B			33.5	30	86.8	88.3	86 S	656	4
5	11.3 B			31.4	29	78.7	110	93 S	884	5
6	11.7 B			30.0	26	67.4	167	191	2 760	6
7	11.8 B			29.9	25	64.6	183	172 S	2 720	7
8	12.0 B			31.3	25	67.6	154	74 S	985	8
9	10.5 B			30.7	24	63.7	128	45 S	498	9
10	10.1 B			25.2 B	23	50.1	116	42	421	10
11	9.48B			26.2 B	23	52.1	105	40	363	11
12	9.26B			27.6	24	57.2	100	39	337	12
13	9.20B			27.4	23	54.4	97.1	37	310	13
14	9.25B			28.4	23	56.4	94.6	36 S	294	14
15	9.35B			32.2	27	75.1	91.9	28	222	15
16	9.45B			36.7	31	98.3	89.3	18 S	139	16
17	9.75B			38.1	36 S	119	90.1	17	129	17
18	10.0 B			42.6	72	265	92.6	16	128	18
19	10.3 B			56.8	123 S	604	101	18	157	19
20	10.4 B			75.2	168 S	1 090	107	18	166	20
21	10.3 B			90.1	160 S	1 250	106	16	147	21
22	10.0 B			103	131	1 170	104	17 S	153	22
23	9.90B			108	98 S	934	109	21 S	198	23
24	10.0 B			107	50	462	147	248	3 150	24
25	10.5 B			101	30 S	262	355	1 060 S	32 500	25
26	11.4 B	20 S	19.7	91.8	27 S	214	418	1 240 S	44 800	26
27	10.9 B	21	19.8	83.1	29	208	337	582	16 900	27
28	10.9 B	23	21.7	79.1	28	191	277	261 S	6 250	28
29	11.2 B	23	22.2	68.7	27	160	338	675 S	19 700	29
30	13.2 B	24	27.4	63.1	29 S	158	391	562 S	19 000	30
31	16.2 B	25	35.0				359	403 S	12 500	31
TOTAL	331.14		146	1 568.8		8 101	5 063.6		167 278	

DAY	JUN DAILY DISCHARGE (m³/s)	JUN MEAN CONCENTRATION (mg/L)	JUN DAILY LOAD (t)	JUL DAILY DISCHARGE (m³/s)	JUL MEAN CONCENTRATION (mg/L)	JUL DAILY LOAD (t)	AUG DAILY DISCHARGE (m³/s)	AUG MEAN CONCENTRATION (mg/L)	AUG DAILY LOAD (t)	DAY
1	324	198 S	5 540	105	13 S	118	59.3	24	123	1
2	288	161 S	4 010	101	14	122	56.7	24	118	2
3	264	145	3 310	95.5	16 S	132	54.8	25	118	3
4	245	129	2 730	87.7	16 S	121	48.9	25	106	4
5	228	108 S	2 130	80.0	16	111	44.6	25	96.3	5
6	205	91 S	1 610	74.7	16 S	103	41.0	25	88.6	6
7	190	73	1 200	72.1	16	99.7	37.4	25	80.8	7
8	183	60	949	71.9	15	93.2	34.8	25	75.2	8
9	172	50 S	743	65.7	15 S	85.1	32.9	25 S	71.1	9
10	171	47 S	694	62.6	15	81.1	30.9	26	69.4	10
11	183	41	648	60.1	17 S	88.3	29.2	32	80.7	11
12	179	35	541	58.7	18	91.3	28.4	44	108	12
13	159	30 S	412	57.1 A	25 S	123	27.5	53	126	13
14	149	28	360	55.4	26	124	26.1	59	133	14
15	138	27	322	52.8	27	123	24.6	62 S	132	15
16	127	26	285	48.9	27	114	24.3	58	122	16
17	121	25	261	45.7	27 S	107	23.6	70	143	17
18	120	25 S	259	42.7	27	99.6	25.4	76	167	18
19	120	26	270	44.8	29	112	25.6	81	135	19
20	122	27	285	44.9	27	105	27.2	54 S	127	20
21	129	32 S	357	40.5	23	80.5	26.0	52	117	21
22	133	30	345	36.7	20	63.4	22.9	55	103	22
23	133	28	322	34.2	18	53.2	20.9	56	101	23
24	136	26	306	38.1	46 S	151	21.8	67	126	24
25	139	24 S	288	56.1	93	451	22.9	82	162	25
26	139	21 S	252	105	147 S	1 330	24.4	98	207	26
27	136 A	20 S	235	97.3	53 S	446	22.3	89 S	171	27
28	114	18	177	87.4	26	196	19.7	71	121	28
29	114	16	158	78.9	22 S	150	18.0	48	74.5	29
30	107	13	120	71.4	23	142	17.5	23	34.9	30
31				64.1	23	127	17.3	15	22.4	31
TOTAL	4 968		29 119	2 037		5 343	936.9		3 460	

A - MANUAL GAUGE B - ICE CONDITIONS S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

OLDMAN RIVER NEAR BROCKET - STATION NO. 05AA024

SUSPENDED SEDIMENT FOR 1990

DAY	SEP DAILY DISCHARGE (m^3/s)	SEP MEAN CONCENTRATION (mg/L)	SEP DAILY LOAD (t)	OCT DAILY DISCHARGE (m^3/s)	OCT MEAN CONCENTRATION (mg/L)	OCT DAILY LOAD (t)	NOV DAILY DISCHARGE (m^3/s)	NOV MEAN CONCENTRATION (mg/L)	NOV DAILY LOAD (t)	DAY
1	17.1	15	22.2	10.6	5	4.58	20.0	5	8.64	1
2	17.0	15	22.0	10.8	5	4.67	19.9 S	5 S	8.60	2
3	16.8	15	21.8	11.1	5	4.80	18.0			3
4	16.3	15	21.1	11.0	6	5.70	17.0			4
5	15.8	15 S	20.5	26.8	29	67.2	18.4			5
6	15.3	15	19.8	32.3	27	75.3	15.0			6
7	14.6	14	17.7	22.2	15	28.8	13.9			7
8	14.2	14	17.2	19.1	11	18.1	17.5			8
9	14.1	13	15.8	18.0	7	10.9	18.1			9
10	13.8	12	14.3	18.7	5	8.08	25.9			10
11	13.5	12	14.0	19.9	5	8.60	67.2			11
12	13.2	11	12.5	18.1	5	7.82	70.3			12
13	13.9	11	13.2	17.6	5	7.60	57.3			13
14	14.1	9	11.0	17.1	5	7.39	51.4			14
15	13.1	8	9.05	16.4	5	7.08	43.7			15
16	12.7	8	8.78	16.3	5	7.04	37.1			16
17	12.5	7	7.56	15.8	5	6.83	34.1			17
18	12.3	6	6.38	15.2	5	6.57	30.9			18
19	12.0	6	6.22	15.5	5	6.70	26.7 B			19
20	12.0	6	6.22	14.9	5	6.44	24.5 B			20
21	11.8	6	6.12	14.3	5	6.18	22.0 B			21
22	11.6	6	6.01	14.9	5	6.44	22.3 B			22
23	11.4	5	4.92	14.8	5	6.39	25.5 B			23
24	11.1	5	4.80	14.4	5	6.22	21.5 B			24
25	10.8	5	4.67	14.4	5	6.22	17.5 B			25
26	10.7	5 S	4.62	14.8	5	6.39	15.0 B			26
27	10.8	5	4.67	18.2	5	7.86	16.2 B			27
28	10.8	5	4.67	16.9	5	7.30	16.5 B			28
29	10.8	5	4.67	17.5	5	7.56	17.4 B			29
30	10.8	5	4.67	17.4	5	7.52	16.5 B			30
31				17.5	5	7.56				31
TOTAL	394.9		337	522.5		376	817.3		17	

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR BROCKET - STATION NO. 05AA024

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)		SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)		DISSOLVED SOLIDS (mg/L)		PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00		PERCENT SAND	SILT	CLAY
MAR 26	15:35	3.0	11.4	W	30.0	X	DIP	22																		
APR 17	13:15	6.0	36.1	H	48.0		D49	35		193																
APR 19	11:30	9.0	56.8	H	48.0		D49	132																		
APR 20	16:00	9.0	75.2	H	48.0		D49	174																		
APR 21	12:30	10.0	90.1	H	48.0		D49	162																		
APR 23	11:45	8.0	108	H	48.0		D49	102		147																
APR 23	16:09	10.0	108	H	48.0		D49	91																		
APR 25	15:00	10.0	101	H	48.0		D49	28																		
APR 26	15:30	5.0	91.8	H	48.0		D49	27																		
APR 30	15:30		63.1	H	48.0		D49	29		178																
MAY 01	16:30	9.0	64.5	H	48.0		D49	34																		
MAY 04	15:00	12.0	88.3	H	48.0		D49	88																		
MAY 05	10:00	14.0	110	H	48.0		D49	91																		
MAY 07	16:00	6.0	183	H	48.0		D49	153		151																
MAY 08	16:30	4.0	154	H	48.0		D49	60																		
MAY 09	16:00	7.0	128	H	48.0		D49	44																		
MAY 14	16:30	8.0	94.6	H	48.0		D49	35		166																
MAY 16	16:30	9.0	89.3	H	48.0		D49	17																		
MAY 22	16:00	11.0	104	H	48.0		D49	18		162																
MAY 23	14:00	12.0	109	H	48.0		D49	18																		
MAY 25	16:00	6.0	355	H	48.0		D49	1270																		
MAY 26	12:30	6.0	430		48.0		D49	1196		135																
MAY 26	14:09	5.0	430		48.0		D49	1243		133	13	25	37	54	73	84	89	97	100				16	59	25
MAY 28	16:00	6.0	273		48.0		D49	242	C	157																
MAY 29	16:00	8.0	375		48.0		D49	926		137																
MAY 30	07:30	9.0	392		48.0		D49	586		142	16	22	40	52	69	79	82	91	99	100			21	57	22
MAY 31	12:15	8.0	362		48.0		D49	404																		
JUN 01	16:00	8.0	326		48.0		D49	161																		
JUN 02	16:30	8.0	280		48.0		D49	161																		
JUN 05	11:30	7.0	230		48.0		D49	107																		
JUN 06	16:30	12.0	203		48.0		D49	88		155																
JUN 09	15:00	11.0	171		48.0		D49	49																		
JUN 10	17:00	11.0	174		48.0		D49	47																		
JUN 13	12:00	8.0	158		48.0		D49	30		147																
JUN 18	15:30	12.0	120		48.0		D49	55																		
JUN 21	12:30	10.0	130		48.0		D49	32		138																
JUN 25	19:30	16.0	140		48.0		D49	44																		
JUN 26	20:00	15.0	139		48.0		D49	19																		
JUN 27	13:59	14.0	136	V	48.0		D49	20		130																
JUL 01	19:30	14.0	105		48.0		D49	13																		
JUL 03	19:00	13.0	94.0		48.0		D49	16																		
JUL 04	13:30	13.0	87.2		48.0		D49	16		147																
JUL 06	19:00	16.0	73.6		48.0		D49	16																		
JUL 09	19:00	19.0	64.8		48.0		D49	14																		
JUL 11	19:30	20.0	60.0		48.0		D49	17		154																
JUL 13	17:00	20.0	57.1	V	48.0		D49	27																		
JUL 17	19:30	19.0	45.3		48.0		D49	27																		
JUL 24	17:00	17.0	40.7		48.0		D49	49																		
JUL 26	16:30	14.0	106		48.0		D49	134		172																
JUL 27	15:20	15.0	96.5		48.0		D49	40																		
JUL 29	16:30	17.0	77.6		48.0		D49	22		164																
AUG 09	14:30	19.0	32.5		48.0		D49	25		184																
AUG 15	09:20	17.0	24.8		34.0	X	DH48	64		192																
AUG 20	19:30	19.0	17.7		48.0		D49	57		197																
AUG 27	12:45	13.0	21.9		48.0		D49	89		205																
SEP 05	10:48	15.0	15.9		30.0	X	DH48	15		202																
SEP 26	09:44	13.0	10.7		32.0	X	DH48	5		221																
NOV 02	09:30	4.0	20.0		36.0	X	DH48	5		190																

NOTE: SINGLE VERTICAL IS LOCATED AT 48 METRES FOR 1990

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE W - DAILY MEAN; ICE CONDITIONS
CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

OLDMAN RIVER NEAR BROCKET - STATION NO. 05AA024

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1966	----CCCCCCCC	MANUAL	335	JUN 5	1	OCT 8	7 190	JUN 5	91 900	---	---	---
1967	CCCCCCCCCCCC	MANUAL	2 890	MAY 30	1	DEC 29	137 000	MAY 31	903 000	3 680	3 680	---
1968	CCCCCCCCCCCC	MANUAL	1 160	MAY 23	1	JAN 1	24 400	MAY 23	77 600	311	2 000	84.4
1969	CCCCCCCCCCCC	MANUAL	2 140	JUN 26	0	SEP 12 *	73 800	JUN 26	248 000	1 140	1 710	59.3
1970	CCCCCCCCCCCC	MANUAL	1 100	JUN 13	0	OCT 22	29 500	JUN 14	127 000	524	1 410	54.9
1971	CCCCCCCCCCCC	MANUAL	754	MAY 6	1	SEP 20	12 700	MAY 20	131 000	530	1 240	50.7
1972	CCCCCCCCCCCC	MANUAL	1 870	MAR 16	0	OCT 27	94 500	JUN 1	603 000	2 800	1 500	38.3
1973	CCCCCCCCCCCC	MANUAL	531	MAY 16	0	OCT 31	8 920	MAY 10	42 800	172	1 310	39.8
1974	CCCCCCCCCCCC	MANUAL	1 360	MAY 8	0	JAN 1	23 900	JUN 17	278 000	1 130	1 280	35.1
1975	CCCCCCCCCCCC	MANUAL	6 480	JUN 20 *	0	FEB 1	586 000	JUN 20 *	1 110 000 *	4 500	1 640	32.5
1976	CCCCCCCCCCCC	MANUAL	2 130	AUG 6	1	SEP 29	49 500	AUG 6	177 000	718	1 550	31.4
1977	CCCCCCCCCCCC	MANUAL	121	APR 9	1	JAN 1	263	APR 9	6 990	27.1	1 410	32.7
1978	CCCCCCCCCCCC	MANUAL	1 260	MAY 11	1	SEP 16	20 000	MAY 15	222 000	904	1 370	30.9
1979	CCCCCCCCCC--	MANUAL	367	MAY 25	1	AUG 30	8 510	MAY 27	88 100	358	1 290	30.8
1980	---CCCCCCCP-	MANUAL	644	MAY 27	4	SEP 9	13 900	MAY 27	79 100	323	1 220	30.6
1981	---CCCCCCC--	MANUAL	1 700	MAY 22	4	OCT 20	70 100	MAY 22	405 000	1 650	1 250	28.0
1982	---CCCCCC---	MANUAL	468	MAY 25	4	AUG 30	7 240	MAY 26	55 500	---	---	---
1983	---CCCCCCC--	MANUAL	271	MAY 26	2	SEP 18	3 980	MAY 26	34 200	140	1 180	28.3
1984	--PCCCCCC--	MANUAL	156	MAY 16	1	AUG 29	1 320	MAY 16	15 700	---	---	---
1985	---CCCCCCC--	MANUAL	357	SEP 12	2	AUG 30	2 220	SEP 13	29 600	---	---	---
1986	---CCCCCCCP-	MANUAL	1 140	MAY 29	1	OCT 26	27 600	MAY 29	196 000	801	1 160	27.2
1987	--PCCCCCCP-	MANUAL	496	APR 29	1	SEP 30	5 300	APR 30	50 800	---	---	---
1988	--PCCCCCCP-	MANUAL	402	JUN 8	3	AUG 7	3 610	JUN 8	28 800	---	---	---
1989	---PCCCCCC--	MANUAL	395	MAY 7	3	SEP 21	5 430	MAY 7	42 600	---	---	---
1990	--PCCCCCCCP-	MANUAL	1 270	MAY 25	5	SEP 26	44 800	MAY 26	214 000	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ALBERTA

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 49 42 30 N LONG 112 52 30 W
DRAINAGE AREA: 17 000 km²
TYPE OF FLOW: REGULATED SINCE 1910
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 948 000 TONNES FOR THE PERIOD MAR 20 TO OCT 31

	MAR			APR			MAY			
DAY	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	42.3 B			41.2	44 S	157	152	143 S	1 880	1
2	41.6 B			46.0	48 S	191	149	144 S	1 850	2
3	41.3 B			49.2	39 S	166	161	168 S	2 340	3
4	46.0 B			58.4	46 S	232	166	172 S	2 470	4
5	47.0 B			69.4	79 S	474	172	184 S	2 730	5
6	43.4 B			71.4	86 S	531	188	344 S	5 590	6
7	45.2 B			70.1	74 S	448	248	850 S	18 500	7
8	49.0 B			71.6	59 S	365	279	685 S	16 500	8
9	47.6 B			74.1	55 S	352	263	411 S	9 340	9
10	49.6 B			74.8	51 S	330	220	250 S	4 750	10
11	46.3 B			70.7	45 S	275	201	160 S	2 780	11
12	39.7			68.8	37 S	220	195	133 S	2 240	12
13	37.4			72.1	41 S	255	192	113 S	1 870	13
14	40.1			73.5	45 S	286	188	105 S	1 710	14
15	40.8			74.7	46 S	297	183	82 S	1 300	15
16	40.7			78.4	55 S	373	178	78 S	1 200	16
17	39.8			81.9	61 S	432	167	65 S	938	17
18	37.3			83.5	66 S	476	157	62 S	841	18
19	37.6			84.4	63 S	459	159	68 S	934	19
20	36.8	46 S	146	96.2	122 S	1 010	164	113 S	1 600	20
21	38.2	47	155	119	304 S	3 130	170	93 S	1 370	21
22	42.9	49	182	143	481 S	5 940	168	67 S	973	22
23	40.8	49	173	163	569 S	8 010	164	47 S	666	23
24	35.3	45	137	170	513 S	7 530	166	46 S	660	24
25	33.6	39 S	113	173	398 S	5 950	207	610 S	10 900	25
26	38.5	35	116	174	302 S	4 540	406	2 800 S	98 200	26
27	39.8	35 S	108	181	342 S	5 350	512	2 180 S	96 400	27
28	38.6	29	96.7	183	299 S	4 730	463	1 210 S	48 400	28
29	38.0	27 S	88.6	176	235 S	3 570	424	699 S	25 600	29
30	37.9	26 S	85.1	162	164 S	2 300	558	1 690 S	81 500	30
31	38.2	27	89.1				670	2 200 S	127 000	31
TOTAL	1 273.7		1 489	3 054.4		58 379	7 690		572 732	

	JUN			JUL			AUG			
DAY	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	631	1 440 S	78 500	115	41 S	407	64.3	10 S	55.5	1
2	606	1 200 S	62 800	111	28 S	269	61.1	12	63.3	2
3	553	742 S	35 500	106	25 S	249	58.6	14 S	70.9	3
4	513	735 S	32 600	80.4	25 S	174	56.7	12	58.8	4
5	453	539 S	21 100	67.1	17 S	98.6	51.9	11 S	49.3	5
6	406	380 S	13 300	57.9	15 S	75.0	47.8	9	37.2	6
7	369	312 S	9 950	59.8	19 S	98.2	41.8	7 S	25.3	7
8	344	242 S	7 190	68.2	26 S	153	37.5	6	19.4	8
9	294	195 S	4 950	78.0	39 S	263	34.2	5 S	14.8	9
10	269	146 S	3 390	66.9	34 S	197	30.2	4	10.4	10
11	274	161 S	3 810	44.6	17 S	65.5	24.6	4 S	8.50	11
12	292	183 S	4 620	29.9	6 S	15.5	19.0	4	6.57	12
13	301	169 S	4 400	25.9	5 S	11.2	17.0	4 S	5.88	13
14	285	131 S	3 230	23.1	7 S	14.0	16.2	4	5.60	14
15	268	101 S	2 480	21.1	6 S	10.9	13.7	4 S	4.73	15
16	238	105 S	2 160	19.3	5 S	8.34	11.6	4	4.01	16
17	215	99 S	1 840	17.3	5	7.47	11.5	5	4.97	17
18	214	79 S	1 460	13.6	7 S	9.23	12.7	5	5.49	18
19	213	80 S	1 470	11.8	7	7.14	13.3	5 S	5.75	19
20	201	76 S	1 320	11.5	7	6.96	14.5	5	6.26	20
21	210	80 S	1 450	11.5	12	11.9	15.4	6	7.98	21
22	211	79 S	1 440	19.6	29	49.1	25.8	6	13.2	22
23	206	66 S	1 170	21.5	31	57.6	26.5	7 S	16.0	23
24	214	77 S	1 420	19.3	29	48.3	26.5	7	16.0	24
25	227	79 S	1 550	22.1	32	61.1	26.7	6	13.8	25
26	220	77 S	1 460	29.9	43 S	111	27.5	7	16.6	26
27	198	69 S	1 180	104	135	1 210	28.1	6 S	14.6	27
28	184	60 S	954	104	105 S	943	28.5	6	14.8	28
29	170	57 S	837	91.4	68	537	26.8	6	13.9	29
30	142	43 S	528	79.4	34 S	233	24.4	6	12.6	30
31				71.8	15	93.1	21.8	6 S	11.3	31
TOTAL	8 921		308 059	1 602.9		5 474	915.8		613	

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

SUSPENDED SEDIMENT FOR 1990

DAY	SEP DAILY DISCHARGE (m³/s)	SEP MEAN CONCENTRATION (mg/L)	SEP DAILY LOAD (t)	OCT DAILY DISCHARGE (m³/s)	OCT MEAN CONCENTRATION (mg/L)	OCT DAILY LOAD (t)	DAY	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	22.0	6	11.4	7.70	7	4.66	1				1
2	24.0	6	12.9	8.11	7 S	4.90	2				2
3	23.3	6	12.1	7.74	7	4.68	3				3
4	22.0	6 S	11.4	7.43	7	4.49	4				4
5	20.9	6	10.8	8.07	8	5.58	5				5
6	17.0	5	7.69	8.43	8 S	5.83	6				6
7	15.5	5	6.70	22.9	19	37.6	7				7
8	14.3	5 S	6.18	20.6	16	39.5	8				8
9	12.7	5	5.49	22.9	14	27.7	9				9
10	12.4	6	6.43	19.1	13 S	21.5	10				10
11	12.0	7	7.26	17.7	12	18.4	11				11
12	11.8	7 S	7.14	22.9	15	29.7	12				12
13	12.8	7	7.74	23.0	11	21.9	13				13
14	12.7	7	7.68	21.6	7 S	13.1	14				14
15	12.8	8	8.85	21.8	7	13.2	15				15
16	12.6	8 S	8.71	25.1	9	19.5	16				16
17	12.7	7	7.68	37.2	14	45.0	17				17
18	12.5	7	7.56	40.6	11 S	38.6	18				18
19	12.5	6	6.48	39.7	11	37.7	19				19
20	11.8	5 S	5.10	39.7	10	34.3	20				20
21	11.5	6	5.96	39.2	10	33.9	21				21
22	11.1	6	5.75	37.7	9 S	29.3	22				22
23	9.91	7	5.99	36.9	9	28.7	23				23
24	9.10	8 S	6.35	36.9	8	25.5	24				24
25	8.25	9	6.42	35.6	8	24.6	25				25
26	7.62	9	5.93	35.0	8 S	24.2	26				26
27	7.50	8 S	5.18	34.3	9	26.7	27				27
28	7.51	8 S	5.75	36.7	9	28.5	28				28
29	7.58	6	3.93	38.6	10	33.3	29				29
30	7.55	7	4.57	37.9	10 S	32.7	30				30
31				38.6	10	33.3	31				31
TOTAL	397.32		219	837.68		749					

S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)		DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAR 20	10:00	0.0	38.0	107	X	DH59	46		215														
MAR 25	13:20	0.0	37.2	100		DH59	38																
MAR 27	11:05	0.0	40.0	100		DH59	34		215														
MAR 27	15:30	4.0	39.8	70.0	X	DH48	22																
MAR 27	19:00	5.0	38.4	100		DH59	35																
MAR 29	10:00	5.0	37.7	100		DH59	27																
MAR 30	14:40	6.0	38.4	100		DH59	26		267														
APR 01	09:30	10.0	40.7	100		DH59	41	C															
APR 02	09:30	12.1	46.0	100		DH59	49	C															
APR 03	10:00	9.5	48.1	100		DH59	39		220														
APR 04	09:40	7.5	52.8	100		DH59	41																
APR 05	09:50	6.0	69.1	100		DH59	80	C															
APR 06	08:30	5.0	71.6	100		DH59	87	C															
APR 07	08:30	6.0	69.6	100		DH59	77																
APR 08	09:30	6.0	72.7	100		DH59	59																
APR 09	09:45	3.5	72.9	100		DH59	55																
APR 10	09:10	1.5	74.5	100		DH59	52		191														
APR 11	12:50	4.0	71.2	100		DH59	47																
APR 12	08:30	4.3	69.3	100		DH59	35																
APR 13	09:00	5.7	72.2	100		DH59	39																
APR 14	07:30	7.5	72.8	100		DH59	46																
APR 15	09:10	9.0	73.1	100		DH59	43																
APR 16	08:00	8.0	76.3	100		DH59	53																
APR 17	08:15	7.5	79.6	100		DH59	58		203														
APR 18	09:00	9.5	83.1	100		DH59	66																
APR 19	10:15	10.5	83.0	100		DH59	59																
APR 20	11:40	13.0	97.1	100		DH59	109		187														
APR 20	11:50	13.0	97.1	100		DH59	101		191														
APR 21	08:30	22.0	117	100		DH59	255	C															
APR 21	16:15	16.7	145	100		DH59	195		195	13	16	31	41	52	54	55	74	98	100		46	38	16
APR 21	08:40	16.7	164	100		DH59	222		175														
APR 22	08:15	9.2	170	100		DH59	530		158														
APR 25	09:40	5.2	175	100		DH59	411	C															
APR 26	12:20	7.2	175	100		DH59	296		152														
APR 27	09:50	6.5	182	100		DH59	362	C															
APR 28	12:20	5.0	183	100		DH59	304	C															
APR 29	09:40	3.0	177	100		DH59	243		158														
APR 30	09:40	4.0	163	100		DH59	181																
MAY 01	08:10	7.0	156	100		DH59	155																
MAY 01	11:05	7.0	152	87.4	X	DH59	137		172														
MAY 01	11:10	7.0	152	100		DH59	146		168														
MAY 01	11:20	7.0	152	112	X	DH59	191	C	174														
MAY 01	11:25	7.0	152	124	X	DH59	161		171														
MAY 01	11:30	7.0	152	140	X	DH59	172		177														
MAY 02	08:45	9.0	153	100		DH59	157																
MAY 03	09:45	10.0	162	100		DH59	166																
MAY 04	10:00	11.0	168	100		DH59	168																
MAY 05	08:20	12.5	177	100		DH59	175																
MAY 06	13:30	14.0	192	100		DH59	213																
MAY 07	10:10	10.5	248	100		DH59	881																
MAY 08	09:00	7.5	308	100		DH59	729		170	12	19	30	44	59	71	79	93	99	100		29	52	19
MAY 09	09:00	5.0	267	100		DH59	427																
MAY 10	10:15	7.0	234	87.4	X	DH59	298		165														
MAY 10	10:20	7.0	234	100		DH59	267		158														
MAY 10	10:25	7.0	234	112	X	DH59	311		160														
MAY 10	10:30	7.0	234	128	X	DH59	277	C	160														
MAY 10	10:35	7.0	234	146	X	DH59	217	C	152														
MAY 10	12:15	8.0	212	100		DH59	248		156														
MAY 11	09:15	8.0	201	100		DH59	168	C															
MAY 12	10:20	8.5	197	100		DH59	137	C															
MAY 13	10:20	8.0	192	100		DH59	113		164														
MAY 14	08:20	8.5	189	100		DH59	109	C															
MAY 15	16:30	10.0	182	100		DH59	79																
MAY 16	16:40	10.0	178	100		DH59	78	C															
MAY 17	16:40	12.0	165	100		DH59	62		166														
MAY 18	16:40	11.0	157	100		DH59	66																
MAY 19	12:20	10.0	160	100		DH59	70																
MAY 20	13:40	11.0	167	100		DH59	136																
MAY 21	16:40	12.0	171	100		DH59	88																
MAY 22	08:15	10.5	168	100		DH59	73																
MAY 23	07:15	12.5	165	100		DH59	49																
MAY 24	09:15	14.2	165	100		DH59	46		161														
MAY 25	09:10	12.2	193	100		DH59	199	C															
MAY 26	08:30	14.2	389	100		DH59	2939		197	11	17	31	42	63	81	87	98	100			19	64	17
MAY 27	09:20	9.0	514	100		DH59	2290																
MAY 28	12:35	10.0	461	72.0	X	DH59	1051		189	19	23	42	59	80	87	94	99	100			13	64	23
MAY 28	12:50	10.0	461	96.0	X	DH59	1069		185	16	25	42	53	80	80	91	97	100			20	55	25
MAY 28	12:55	10.0	461	100		DH59	1162		185	19	25	42	54	70	80	88	98	100			20	55	25
MAY 28	13:00	10.0	461	116	X	DH59	1196		184	17	23	38	50	66	77	84	97	100			23	54	23
MAY 28	13:05	10.0	461	126	X	DH59	1114		174	17	23	39	51	68	79	85	97	100			21	56	23
MAY 28	13:15	10.0	461	153	X	DH59	1016		172	18	26	44	58	78	89	95	99	100			11	63	26
MAY 28	16:50	10.0	444	100		DH59	1021																
MAY 29	15:50	12.0	426	100		DH59	884		177	17	23	38	46	60	70	77	94	100			30	47	23
MAY 30	09:20	9.5	553	100		DH59	1531																
MAY 31	16:30	12.0	679	100		DH59	2133		189	14	18	31	39	59	74	83	97	100			26	56	18
JUN 01	16:30	11.0	612	100		DH59	1776	C	158														
JUN 02	11:30	10.0	617	100		DH59	1307		173	15	25	32	45	66	79	88	98	100			21	54	25
JUN 03	10:30	9.5	552	100		DH59	772																
JUN 04	12:00	10.5	513	100		D49	702																
JUN 04	12:15	10.0	503	70.0	X	D49	651		184	13	22	35	47	67	81	89	94	100			19	59	22
JUN 04	12:30	10.0	503	95.0	X	D49	734		183	15	20	34	45	65	78	90	99	100			22	58	20
JUN 04	12:45	10.0	503	100		D49	728		184	11	20	30	43	62	75	86	98	100			25	55	20
JUN 04	12:55	10.0	503	100		D49	696		172	17	22	36	46	66	79	91	99	100			21	57	22
JUN 04	16:05	10.0	503	110	X	D49	731		174	10	11	30	44	63	78	91	99	100			22	67	11
JUN 04	16:10	10.0	503	130	X	D49	655		165	19	22	40	52	73	85	93	98	100			15	63	22
JUN 04	16:20	10.0	503	153	X	D49	541		182	12	20	30	42	59	71	81	95	100			29	51	20
JUN 05	09:00	10.0	455	100		D49	392																
JUN 06	08:00	10.0	413	100		D49	323																
JUN 07	08:00	12.0	374	100		D49	236																
JUN 08	12:15	11.0	345	100		D49	205																
JUN 09	09:20	11.0	301	100		D49	145																
JUN 10	13:15	14.0	268	100		D49	177		171														
JUN 11	16:45	11.0	277	100		D49	188																
JUN 12	16:45	9.5	296	100		D49	161		155														
JUN 13	14:50	8.0	305	100		D49	131		159														
JUN 14	12:30	10.0	283	100		D49	104																
JUN 15	17:15	14.0	263	100		D49	126																
JUN 16	17:44	15.5	225	100		D49	83																
JUN 17	15:50	15.5	215	100		D49	78																
JUN 18	09:30	14.0	214	100		D49																	

CONTINUED

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 19	10:00	14.0	222	100		D49	84															
JUN 20	09:40	14.5	200	100		D49	71															
JUN 21	10:55	14.5	209	100		D49	81	160														
JUN 22	11:40	15.0	213	100		D49	79															
JUN 23	11:00	16.9	207	100		D49	64															
JUN 24	09:45	17.5	214	100		D49	76															
JUN 25	08:00	18.0	226	100		D49	81	152														
JUN 26	17:30	20.5	217	100		D49	76															
JUN 27	13:30	20.0	194	100		D49	69															
JUN 28	13:05	20.0	186	100		DH59	56															
JUN 28	16:45	20.0	182	100		DH59	60															
JUN 29	07:30	16.5	175	100		DH59	50															
JUN 30	09:00	18.1	149	100		DH59	43	147														
JUL 01	09:15	16.4	115	100		DH59	44	158														
JUL 02	08:15	16.7	110	100		DH59	28															
JUL 03	09:20	15.5	110	100		DH59	26															
JUL 04	13:20	16.5	79.4	100		DH59	26															
JUL 05	08:00	15.5	68.2	100		DH59	18															
JUL 06	10:00	17.0	58.7	100		DH59	15															
JUL 07	10:10	15.5	55.3	100		DH59	15	181														
JUL 08	09:30	15.5	68.4	100		DH59	26															
JUL 09	15:30	22.0	81.1	100		DH59	115															
JUL 10	17:30	23.0	63.8	100		DH59	32															
JUL 11	13:40	24.0	40.4	100		DH59	12															
JUL 12	17:30	24.0	28.0	100		DH59	6															
JUL 13	16:30	25.0	26.2	100		DH59	4															
JUL 14	16:30	24.0	21.0	100		DH59	8	201														
JUL 15	16:00	24.0	21.1	100		DH59	6															
JUL 16	10:15	21.0	19.2	100		DH59	5															
JUL 18	10:00	20.0	13.9	100		DH59	8	208														
JUL 26	07:10	17.0	26.1	70.0	X	DH48	30															
JUL 26	10:50	18.0	26.5	100		DH59	18	203														
JUL 28	11:15	18.0	105	100		DH59	106															
JUL 30	10:30	18.5	79.4	100		DH59	34															
AUG 01	10:30	19.0	64.2	100		DH59	10															
AUG 03	16:50	22.0	60.6	100		DH59	16	188														
AUG 05	16:30	23.0	51.4	100		DH59	11															
AUG 07	12:30	21.0	41.9	100		DH59	7															
AUG 09	11:30	20.0	35.1	100		DH59	5															
AUG 11	11:30	22.0	25.2	100		DH59	4	196														
AUG 13	16:40	25.0	17.0	100		DH59	4															
AUG 15	10:40	22.0	13.8	100		DH59	4															
AUG 19	13:40	22.0	13.4	100		DH59	5	206														
AUG 23	10:20	18.0	26.3	80.0	X	DH48	5	208														
AUG 23	10:25	18.0	26.3	50.0	X	DH48	5	207														
AUG 23	10:35	18.0	26.3	44.0	X	DH48	5	216														
AUG 23	10:40	18.0	26.3	40.0	X	DH48	4	219														
AUG 23	10:45	18.0	26.3	34.0	X	DH48	4	210														
AUG 25	11:10	18.0	26.1	100		DH59	5	207														
AUG 27	16:50	15.0	26.0	100		DH59	8	206														
AUG 29	16:40	16.0	28.3	100		DH59	6															
AUG 31	17:40	16.5	27.2	100		DH59	6	206														
SEP 04	11:00	17.0	22.0	100		DH59	6															
SEP 08	08:30	15.5	14.4	100		DH59	5	206														
SEP 12	11:30	17.0	11.7	100		DH59	7															
SEP 16	15:45	18.5	12.9	100		DH59	8	202														
SEP 20	11:00	14.0	11.9	100		DH59	5															
SEP 24	17:30	18.0	9.29	100		DH59	8	202														
SEP 27	07:35	13.0	7.63	72.0	X	DIP	8															
SEP 28	11:10	11.0	7.26	100		DH59	6															
OCT 02	11:20	10.0	8.09	100		DH59	7															
OCT 06	09:30	7.0	8.36	100		DH59	8															
OCT 10	08:00	7.0	18.8	100		DH59	13															
OCT 14	16:00	5.0	21.4	100		DH59	7															
OCT 18	10:30	9.0	40.7	100		DH59	11	186														
OCT 22	11:00	12.5	37.7	100		DH59	9															
OCT 26	10:15	5.0	35.5	100		DH59	8	196														
OCT 30	09:20	4.0	38.1	WERB	X	DIP	11															
OCT 30	10:40	4.0	38.0	100		DH59	9	199														

NOTE: SINGLE VERTICAL IS LOCATED AT 100 METRES FOR 1990

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)		SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1972	--CCCCCCCCCC		2 480	JUN 2	6	NOV 5	173 000	JUN 2	3 180 000		12 900	12 900	---
1973	CCCCCCCCCCCC		923	MAY 20	2	JAN 8 *	19 700	MAY 20	159 000		641	6 800	90.6
1974	CCCCCCCCCCCC		2 160	MAY 2	3	OCT 13	103 000	JUN 18	1 710 000		6 970	6 850	51.8
1975	CCCCCCCCCCCC		10 100	JUN 21 *	4	AUG 26	1 680 000	JUN 21 *	5 760 000	*	23 400	11 000	44.1
1976	CCCCCCCCCCCC	MANUAL	3 200	AUG 7	3	SEP 23	90 100	AUG 7	735 000		2 980	9 400	43.5
1977	CCCCCCCCCCCC	MANUAL	127	JUN 12	3	JAN 6	416	JUN 11	11 500		40.8	7 840	47.0
1978	CCCCCCCCCCCC	MANUAL	4 420	MAY 19	5	JAN 24	112 000	MAY 19	1 340 000		5 450	7 500	41.7
1979	CCCCCCCCCC--	MANUAL	2 750	MAY 28	6	AUG 1	103 000	MAY 28	944 000		3 850	7 040	39.0
1980	--CCCCCCCP-	MANUAL	7 470	MAY 27	7	AUG 27	418 000	MAY 27	1 010 000		4 100	6 720	36.4
1981	--CCCCCCCC--	MANUAL	5 260	MAY 23	5	SEP 6	468 000	MAY 23	2 490 000		10 100	7 060	31.4
1982	--CCCCCCCP-	MANUAL	1 690	MAY 29	4	MAR 1	33 900	MAY 29	508 000		2 070	6 600	31.1
1983	--CCCCCCCC--	MANUAL	995	MAY 28	4	APR 13	22 400	MAY 28	134 000		548	6 100	31.8
1984	--CCCCCCCP-	MANUAL	304	JUN 1	6	APR 1	2 250	JUN 1	24 200		98.2	5 640	32.7
1985	---CCCCCCC--	MANUAL	1 170	SEP 14	4	AUG 29	11 600	MAY 27	184 000		---	---	---
1986	--CCCCCCCP-	MANUAL	2 040	MAY 30	2	AUG 17	81 900	MAY 30	735 000		3 000	5 450	31.5
1987	--CCCCCCCC--	MANUAL	1 590	MAY 1	4	JUL 1	26 100	MAY 1	206 000		840	5 140	31.7
1988	--PCCCCCCP-	MANUAL	408	MAY 14	6	JUN 26	3 290	MAY 14	24 600		---	---	---
1989	---PCCCCCC--	MANUAL	1 130	JUN 13	5	JUL 23	26 500	JUN 13	186 000		---	---	---
1990	--PCCCCCCC--	MANUAL	2 940	MAY 26	4	JUL 13	127 000	MAY 31	948 000		---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 49 48 50 N LONG 114 11 00 W
DRAINAGE AREA: 1 440 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 108 000 TONNES FOR THE PERIOD APR 01 TO SEP 30

DAY	APR DAILY DISCHARGE (m³/s)	APR MEAN CONCENTRATION (mg/L)	APR DAILY LOAD (t)	MAY DAILY DISCHARGE (m³/s)	MAY MEAN CONCENTRATION (mg/L)	MAY DAILY LOAD (t)	JUN DAILY DISCHARGE (m³/s)	JUN MEAN CONCENTRATION (mg/L)	JUN DAILY LOAD (t)	DAY
1	6.02B	5	2.60	13.7	4 S	4.73	138	317 S	3 780	1
2	5.33B	5 S	2.30	15.8	7 S	9.56	125	243 S	2 620	2
3	6.43	10 S	5.56	18.4	13 S	20.7	112	186	1 820	3
4	6.44	5 S	2.78	25.9	24 S	53.7	103	133 S	1 180	4
5	5.61	3	1.45	37.8	30 S	98.0	88.5	79	604	5
6	5.57	6 S	2.89	62.9	102 S	554	76.4	62 S	409	6
7	5.79	4	2.00	57.7	72 S	359	71.4	43	265	7
8	6.14	3 S	1.59	44.4	27 S	104	64.7	25 S	140	8
9	5.42B	4 S	1.87	36.7	18 S	57.1	59.9	17 S	88.0	9
10	4.20B	7 S	2.54	33.9	13 S	38.1	62.9	20	109	10
11	5.00B	17 S	7.34	31.4	11 S	29.8	64.4	24	134	11
12	5.55B	5 S	2.40	29.8	8 S	20.6	56.5	20 S	97.8	12
13	5.15	3	1.33	28.5	7 S	17.2	50.2	14 S	60.7	13
14	5.56	4 S	1.92	27.9	9	21.7	48.0	10 S	41.5	14
15	6.74	6	3.49	26.4	10 S	22.8	43.4	9 S	33.7	15
16	8.56	6 S	4.44	26.1	6 S	13.5	43.0	11 S	40.9	16
17	9.23	5	3.99	27.1	4 S	9.37	44.5	12 S	46.1	17
18	11.7	9 S	9.10	29.7	7 S	18.0	47.0	9 S	36.5	18
19	17.3	27 S	40.3	35.2	12	36.5	47.5	10 S	41.0	19
20	24.6	31 S	65.9	38.6	14 S	46.7	49.8	10 S	43.0	20
21	29.0	38 S	95.2	38.5	14 S	46.6	49.6	10 S	42.8	21
22	32.0	37 S	102	38.4	9 S	29.9	48.4	10 S	41.8	22
23	30.4	23 S	60.4	42.6	14 S	51.5	50.5	10	43.6	23
24	28.5	16 S	39.4	65.4	51 S	288	50.3	11 S	47.0	24
25	26.3	11 S	25.0	206	299 S	5 320	49.4	19 S	81.1	25
26	23.1	6 S	12.0	227	1 450 S	28 400	46.4	42 S	168	26
27	20.0	5 S	8.64	169	825 S	12 000	43.1	38	142	27
28	17.4 B	5 S	7.52	137	342 S	4 050	39.0	33 S	111	28
29	14.1 B	3 S	3.65	194	1 310 S	22 000	34.8	30 S	90.2	29
30	12.7	4 S	4.39	197	810 S	13 800	33.0	30	85.5	30
31				162	465 S	6 510				31
TOTAL	389.84		524	2 124.8		94 031	1 840.5		12 444	

DAY	JUL DAILY DISCHARGE (m³/s)	JUL MEAN CONCENTRATION (mg/L)	JUL DAILY LOAD (t)	AUG DAILY DISCHARGE (m³/s)	AUG MEAN CONCENTRATION (mg/L)	AUG DAILY LOAD (t)	SEP DAILY DISCHARGE (m³/s)	SEP MEAN CONCENTRATION (mg/L)	SEP DAILY LOAD (t)	DAY
1	32.6	29	81.7	24.5	5	10.6	7.74	5	3.34	1
2	30.4	27 S	70.9	24.4	4 S	8.43	7.52	2	1.30	2
3	28.4	22	54.0	22.4	5	9.68	7.32	1 S	0.632	3
4	25.8	14	31.2	19.8	5	8.55	7.17	1	0.619	4
5	23.1	5 S	9.98	18.0	7 S	10.9	6.94	2	1.20	5
6	22.0	2	3.80	16.4	7	9.92	6.70	2	1.16	6
7	23.4	4	8.09	15.0	5	6.48	6.45	2	1.11	7
8	25.5	2 S	3.89	13.9	4	4.80	6.26	2	1.08	8
9	20.9	1	1.74	13.1	5	5.66	6.15	2	1.06	9
10	18.7	1	1.62	12.4	5	5.36	6.00	1	0.518	10
11	17.6	1	1.52	11.9	5	5.14	5.89	1	0.509	11
12	16.8	1 S	1.45	12.5	4	4.32	5.80	3	1.50	12
13	16.1	2	2.78	11.8	3 S	3.06	6.55	12	6.79	13
14	15.1	1	1.30	10.8	6	5.60	6.11	15	7.92	14
15	13.9	1 S	1.20	10.1	8	6.98	5.82	14	7.04	15
16	13.0	1	1.12	9.89	11	9.40	5.75	12	5.96	16
17	12.3	1	1.06	9.57	20 S	16.5	5.63	11	5.35	17
18	12.5	1	1.08	10.0	27	23.3	5.56	11	5.28	18
19	17.3	2	2.99	12.5	28	30.2	5.47	9 S	4.25	19
20	14.8	1	1.28	11.3	27	26.4	5.41	8	3.74	20
21	12.8	1	1.11	10.2	26	22.9	5.32	7	3.22	21
22	11.6	1	1.00	9.37	22	17.8	5.25	7	3.18	22
23	11.0	1	0.950	9.77	21 S	17.7	5.18	6	2.69	23
24	14.9	1 S	3.96	10.5	23	20.9	5.06	5 S	2.19	24
25	26.1	26	63.1	10.6	23	21.1	5.00	5	2.16	25
26	55.0	31 S	147	11.4	25	24.6	4.97	5	2.15	26
27	46.3	24	100	10.0	21	18.1	4.91	4	1.70	27
28	39.6	20 S	68.4	9.18	19	15.1	4.86	3	1.26	28
29	34.1	15	44.2	8.54	15	11.1	4.81	3	0.831	29
30	29.8	9 S	23.2	8.23	11	7.82	4.72	2	0.816	30
31	26.8	5	11.6	7.91	8	5.47				31
TOTAL	706.4		747	395.96		394	176.32		81	

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)		DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR	02 10:20	3.0	5.30	6.2		DH59	5		209														
APR	03 10:00	3.0	6.39	6.2		DH59	10																
APR	04 10:44	2.0	6.44	30.0	K	DH48	4		195														
APR	06 10:35	2.5	5.29	6.2		DH59	6		219														
APR	06 10:36	2.5	5.29	6.2		DH59	3		225														
APR	08 10:20	1.5	6.32	6.2		DH59	3																
APR	09 16:45	1.0	5.10	6.2		DH59	3																
APR	10 10:45	0.5	4.20	6.2		DH59	4																
APR	11 11:00	1.0	5.00	MID	X	DH48	17		235														
APR	12 10:30	2.0	5.48	MID	X	DH48	2																
APR	14 15:45	4.0	5.49	MID	X	DH48	3		232														
APR	14 15:46	4.0	5.49	MID	X	DH48	4		252														
APR	16 20:45	6.0	8.96	6.2		DH59	5																
APR	18 12:00	5.0	11.2	6.2		DH59	8		167														
APR	19 11:00	5.0	17.0	6.2		DH59	25		170														
APR	20 15:30	5.0	23.1	6.2		DH59	29																
APR	21 10:35	4.0	28.0	6.2		DH59	38																
APR	22 10:45	3.5	31.3	6.2		DH48	38		149														
APR	23 10:00	4.0	30.2	6.2		DH59	25		140														
APR	23 10:01	4.0	30.2	6.2		DH59	22		147														
APR	24 10:05	4.5	28.3	6.2		DH59	16																
APR	25 09:50	3.0	26.7	6.2		DH59	11																
APR	26 10:10	2.0	24.1	6.2		DH59	6																
APR	27 11:35	4.0	19.5	6.2		DH59	5		161														
APR	28 11:30	10.0	17.0	6.2		DH59	5																
APR	29 10:50	10.0	12.5	6.2		DH59	3																
APR	30 10:44	2.0	11.0	36.0	K	DH59	3																
MAY	01 09:55	3.5	12.2	6.2		DH59	4																
MAY	02 09:40	5.0	15.8	6.2		DH59	6																
MAY	03 10:05	5.0	18.4	6.2		DH59	13																
MAY	04 11:30	6.0	22.4	6.2		DH59	24		172														
MAY	05 17:15	8.0	35.6	6.2		DH59	26																
MAY	06 19:35	8.0	68.4	6.2		DH59	109																
MAY	07 16:45	5.0	53.3	6.2		DH59	36																
MAY	08 10:00	2.0	44.8	6.2		DH59	28																
MAY	09 09:45	3.0	36.0	6.2		DH59	18																
MAY	10 09:40	4.0	34.1	6.2		DH59	14																
MAY	11 09:55	4.0	31.7	6.2		DH59	11		155														
MAY	12 12:46	4.5	29.6	6.2		DH59	7																
MAY	13 10:45	3.5	28.4	6.2		DH59	7																
MAY	15 10:45	4.0	26.3	6.2		DH59	10																
MAY	16 17:00	9.0	24.9	6.2		DH59	4																
MAY	17 17:45	8.0	26.5	6.2		DH59	4																
MAY	18 16:55	6.0	30.3	6.2		DH59	8																
MAY	20 10:40	5.5	38.7	6.2		DH59	13		160														
MAY	21 12:00	5.5	39.5	6.2		DH59	15	C															
MAY	22 16:30	8.0	37.5	6.2		DH59	8																
MAY	23 17:05	11.0	34.7	6.2		DH59	13																
MAY	24 16:45	6.0	67.3	6.2		DH59	55		135														
MAY	25 16:59	4.0	233	6.2		D49	309	C															
MAY	26 14:00	5.5	225	6.2		D49	1776		124														
MAY	26 14:01	5.5	225	6.2		D49	1386		126														
MAY	27 17:00	7.0	155	6.2		D49	663	C	125														
MAY	27 17:01	7.0	155	6.2		D49	757	C	126														
MAY	28 18:00	5.0	135	6.2		D49	335	C															
MAY	29 10:00	6.0	206	6.2		DH59	1486		132	04	09	14	19	27	38	53	88	99	100		62	29	9
MAY	30 13:15	7.0	198	6.2		D49	727	C															
MAY	31 20:15	9.0	150	6.2		D49	417	C															
JUN	01 20:40	7.0	129	6.2		D49	264	C															
JUN	02 22:10	7.0	125	6.2		D49	221	C															
JUN	04 20:00	8.0	98.8	6.2		D49	90		141														
JUN	06 19:45	10.0	73.0	6.2		D49	55	C															
JUN	08 19:40	10.0	61.7	6.2		DH59	18																
JUN	09 19:45	12.0	58.4	6.2		DH59	17		146														
JUN	12 16:15	8.0	54.7	6.2		DH59	10	C															
JUN	13 19:50	7.0	49.3	6.2		DH59	10																
JUN	14 19:45	9.0	45.9	6.2		DH59	10																
JUN	15 20:30	11.0	41.7	6.2		DH59	8																
JUN	16 20:30	8.0	43.3	6.2		DH59	13		151														
JUN	17 20:43	10.0	44.2	6.2		DH59	8																
JUN	18 20:00	10.0	45.9	6.2		DH59	10	C															
JUN	19 19:45	10.0	46.6	6.2		DH59	8																
JUN	20 20:39	9.0	50.5	6.2		DH59	11																
JUN	21 21:43	12.0	47.9	6.2		DH59	9																
JUN	22 21:54	12.0	48.6	6.2		DH59	9		153														
JUN	24 17:00	12.0	48.1	6.2		DH59	11																
JUN	25 12:27	10.0	48.2	6.2		DH59	12																
JUN	26 20:05	13.0	43.8	6.2		DH59	40																
JUN	28 21:30	12.0	36.8	6.2		DH59	31																
JUN	29 20:25	13.5	33.0	6.2		DH59	8		146														
JUL	02 17:00	11.5	29.9	6.2		DH59	26																
JUL	05 19:40	14.0	22.5	6.2		DH59	3																
JUL	08 20:05	14.5	21.2	6.2		DH59	1		166														
JUL	12 18:30	16.0	16.6	6.2		DH59	2																
JUL	15 19:45	16.0	13.7	6.2		DH59	4		177														
JUL	24 09:40	14.0	16.2	6.2		DH59	1	C	186														
JUL	26 20:00	10.0	59.5	6.2		DH59	27																
JUL	28 20:10	12.0	37.4	6.2		DH59	19																
JUL	30 19:50	15.0	29.5	6.2		DH59	7		160														
AUG	02 11:30	16.0	24.5	6.2		DH59	4																
AUG	05 19:10	16.0	17.8	6.2		DH59	10		184														
AUG	13 10:35	13.0	12.0	34.0	K	D49	3		183														
AUG	17 10:00	8.0	9.41	6.2		DH59	22		236														
AUG	17 10:01	8.0	9.41	6.2		DH59	45		242														
AUG	23 17:30	13.0	10.5	6.2		DH59	20																
SEP	03 10:53	11.0	7.33	34.0	K	DH48	1		207														
SEP	19 14:25	13.0		6.2		DH48	9		209														
SEP	24 11:32	12.0		6.2		DH48	5		217														

NOTE: SINGLE VERTIC[illegible]OCATED AT 6.2 METRES FOR 1990

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL, FROM LEFT BANK
X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	117	JUN 5	14	MAY 6	---	---	---	---	---	---
1975	----PPPPPPP-	MANUAL	2 520	JUN 21 *	1	AUG 12	---	---	---	---	---	---
1976	---CCCCCCCCC	MANUAL	1 080	AUG 6	0	OCT 19 *	16 100	AUG 6	39 500	---	---	---
1977	CCCCCCCCCCCC	MANUAL	51	APR 5	0	JAN 1	96.6	MAY 11	1 360	5.40	5.40	---
1978	CCCCCCCCCCC-	MANUAL	248	MAR 10	1	DEC 1	887	MAY 22	17 000	69.1	37.2	85.5
1979	CCCCCCCCCC--	MANUAL	136	MAY 27	0	JUL 15	1 100	MAY 27	7 620	31.3	35.3	52.4
1980	--CCCCCCCP-	MANUAL	122	APR 30	0	APR 1	577	APR 30	6 270	26.0	33.0	40.3
1981	--CCCCCCC--	MANUAL	847	MAY 22	1	OCT 11	11 100	MAY 26	63 400	259	78.1	59.3
1982	---PCCCC---	MANUAL	43	MAY 26	1	JUL 22	241	JUN 16	4 010	---	---	---
1983	---CCCCCC--	MANUAL	60	MAY 26	1	SEP 20	229	MAY 26	2 160	---	---	---
1984	---PCCCC---	MANUAL	147	MAY 16	1	JUL 17	366	MAY 16	1 840	---	---	---
1985	---CCCCCC--	MANUAL	124	JUN 8	1	JUL 30	611	JUN 8	3 130	---	---	---
1986	--PCCCCCCP-	MANUAL	542	MAY 21	1	SEP 4	5 980	MAY 29	33 500	---	---	---
1987	---CCCCCCP-	MANUAL	127	JUL 19	1	JUL 3	387	APR 30	2 860	---	---	---
1988	---CCCCCC--	MANUAL	74	JUN 8	1	AUG 25	347	JUN 8	2 420	---	---	---
1989	---PCCCCCP-	MANUAL	72	MAY 6	1	AUG 19	290	MAY 7	3 830	---	---	---
1990	---CCCCC---	MANUAL	1 780	MAY 26	1	JUL 8	28 400	MAY 26	108 000 *	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PADDLE RIVER AT BARRHEAD - STATION NO. 07BB006

LOCATION: LAT 54 06 45 N LONG 114 23 55 W
DRAINAGE AREA: 2 380 km²
TYPE OF FLOW: REGULATED SINCE 1984
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1975	---PP-------	MANUAL	331	APR 24	76	MAY 5 *	---	---	---	---	---	---
1976	---PP-------	MANUAL	491	APR 9 *	6	MAY 20 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PADDLE RIVER NEAR ROCHFORT BRIDGE - STATION NO. 07BB004

LOCATION: LAT 53 53 44 N LONG 115 02 27 W
DRAINAGE AREA: 625 km²
TYPE OF FLOW: REGULATED SINCE 1984
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	------PPFP--	MANUAL	422	JUL 14	10	OCT 31	---	---	---	---	---	---
1975	---PPPPPP---	MANUAL	1 270	MAY 5	5	JUN 17 *	---	---	---	---	---	---
1976	---PPPPPP---	MANUAL	862	APR 6	5	MAY 20	---	---	---	---	---	---
1977	---PPP-PP---	MANUAL	880	MAY 30	11	JUN 23	---	---	---	---	---	---
1978	---PPPPPPP--	MANUAL	1 430	JUN 15	18	AUG 28	---	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	1 600	APR 24 *	6	AUG 20	---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	918	JUN 26	16	OCT 14	---	---	---	---	---	---
1981	---PPPPPPP--	MANUAL	78	APR 21	10	JUL 6	---	---	---	---	---	---
1982	-------PP-PP-	MANUAL	406	JUL 7	23	NOV 2	---	---	---	---	---	---
1983	-----PP-P----	MANUAL	218	JUN 28	23	SEP 21	---	---	---	---	---	---
1985	----P-PPPP--	MANUAL	303	AUG 15	14	OCT 7	---	---	---	---	---	---
1986	---PPPPP--P-	MANUAL	54	NOV 6	10	AUG 26	---	---	---	---	---	---
1987	----PPPPPP--	MANUAL	75	MAY 22	7	JUL 13	---	---	---	---	---	---
1988	-----PP------	MANUAL	487	JUL 6	104	JUL 14	---	---	---	---	---	---
1989	---P---PP----	MANUAL	193	AUG 6	9	SEP 28	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ALBERTA

PEACE RIVER AT DUNVEGAN BRIDGE - STATION NO. 07FD003

LOCATION: LAT 55 55 09 N LONG 118 36 19 W
DRAINAGE AREA: 130 000 km²
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1975	---PCCCCCC--	MANUAL	2 470	MAY 27	10	OCT 21	472 000	MAY 27	5 940 000 *	---	---	---
1976	---PPPPP----	MANUAL	804	MAY 6	117	APR 30	---	---	---	---	---	---
1977	-----P-P----	MANUAL	4 730	JUN 13 *	130	AUG 18	---	---	---	---	---	---
1979	----P---P---	MANUAL	242	MAY 23	221	SEP 13	---	---	---	---	---	---
1980	---------P--	MANUAL	115	OCT 15	115	OCT 15	---	---	---	---	---	---
1981	---------P--	MANUAL	23	OCT 22	23	OCT 22	---	---	---	---	---	---
1982	-----P------	MANUAL	95	JUN 22	95	JUN 55	---	---	---	---	---	---
1983	--------P---	MANUAL	12	SEP 16	12	SEP 16	---	---	---	---	---	---
1984	-------P----	MANUAL	35	AUG 22	35	AUG 22	---	---	---	---	---	---
1985	-----P-P-P--	MANUAL	263	JUN 3	11	AUG 6	---	---	---	---	---	---
1986	------PPP---	MANUAL	47	JUL 9	5	SEP 12 *	---	---	---	---	---	---
1987	----P-P-PP--	MANUAL	250	MAY 13	45	SEP 9	---	---	---	---	---	---
1988	----P-PP-P--	MANUAL	836	JUL 6	13	OCT 18	---	---	---	---	---	---
1989	-----PPPPPP-	MANUAL	533	JUN 12	10	NOV 6	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PEACE RIVER AT PEACE POINT - STATION NO. 07KC001

LOCATION: LAT 59 06 50 N LONG 112 25 35 W
DRAINAGE AREA: 293 000 km²
TYPE OF FLOW: REGULATED SINCE 1968
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 15	13:40	15.0	6660	351		D49	1312	156	20	30	41	52	69	81	93	98	100			19	51	30
JUN 15	13:46	15.0	6660	351		DIP	961	173	33	42	57	68	85	94	98	99	100			6	52	42
JUN 16	18:15	15.0	12400	290	X	D49	4820	218	13	25	36	50	70	85	91	97	100			15	60	25
JUN 16	18:27	15.0	12400	290	X	DIP	4312	203	27	32	46	59	80	92	96	99	100			8	60	32
JUN 19	19:15	13.5	11700	351		DIP	6618															
JUN 21	13:05	16.0	6720	351		D49	3254	181														
JUN 21	13:12	16.0	6720	351		DIP	3645															
JUL 06	12:43	19.0	2800	310	X	D49	418	157														
JUL 06	12:45	19.0	2800	310	X	DIP	275															
JUL 24	13:36	19.0	1870	351		D49	171	154														
JUL 24	13:45	19.0	1870	351		DIP	136															
OCT 10	12:45	6.0	1660	351		D49	74	133														
OCT 10	12:57	6.0	1660	351		DIP	62															

NOTE: SINGLE VERTICAL IS LOCATED AT 351 METRES FOR 1990

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

PEACE RIVER AT PEACE POINT - STATION NO. 07KC001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)				SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)		SUMMARY : MAY-OCT MEAN LOAD (TONNES)	SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-OCT STANDARD ERROR OF MEAN %
1967	----PCCCC---	MANUAL	2	930	JUN 6		20	SEP	27	2	530 000	JUN 7		52	700 000 *	---	---	---
1968	----CCCCC---	MANUAL	4	900	JUN 19		47	SEP	12	2	470 000	JUN 19		21	700 000	---	---	---
1969	----CCCCC---	MANUAL	1	630	MAY 7		101	SEP	30		677 000	MAY 7		13	900 000	---	---	---
1970	-P-PP-P--P--	MANUAL		507	MAY 8		42	FEB	23		---	---			---	---	---	---
1971	-----PCCC---	MANUAL	4	440	JUN 22		28	SEP	27	2	740 000	JUN 22	*	36	100 000	---	---	---
1972	P-PP-P-PPPP-	MANUAL	3	030	JUN 22		14	NOV	29	*	---	---			---	---	---	---
1973	-PPPP-PP-P--	MANUAL	1	180	MAY 10		27	MAR	27		---	---			---	---	---	---
1974	----P-PPPP--	MANUAL	2	190	MAY 8		51	SEP	26		---	---			---	---	---	---
1975	-----P------	MANUAL		273	JUN 3		261	JUN	26		---	---			---	---	---	---
1976	-----PPPPP--	MANUAL	1	410	JUL 14		136	SEP	17		---	---			---	---	---	---
1977	-----P----P--	MANUAL		393	MAY 5		105	OCT	26		---	---			---	---	---	---
1978	----P-P-----	MANUAL	1	050	MAY 12		235	JUL	19		---	---			---	---	---	---
1979	-----PP-P---	MANUAL		625	JUN 21		106	SEP	21		---	---			---	---	---	---
1980	----PP-P-P--	MANUAL	1	420	JUN 27		46	OCT	21		---	---			---	---	---	---
1981	----PPP-P-P-	MANUAL		950	MAY 19		35	SEP	14		---	---			---	---	---	---
1982	----P-PPP---	MANUAL	3	230	AUG 10		74	SEP	30		---	---			---	---	---	---
1983	-----P--P-P-	MANUAL		244	JUN 13		67	NOV	3		---	---			---	---	---	---
1984	---PPP-P-P--	MANUAL	2	320	JUN 15		31	AUG	27		---	---			---	---	---	---
1985	----P-P--P--	MANUAL		453	MAY 28		78	OCT	29		---	---			---	---	---	---
1986	----P---P---	MANUAL		599	MAY 21		16	SEP	4		---	---			---	---	---	---
1987	----P-PP----	MANUAL	6	950	AUG 9	*	85	JUL	24		---	---			---	---	---	---
1988	-----P------	MANUAL		416	JUN 8		346	JUN	8		---	---			---	---	---	---
1989	---------P--	MANUAL		37	OCT 20		34	OCT	20		---	---			---	---	---	---
1990	-----PP--P--	MANUAL	6	620	JUN 18		62	OCT	10		---	---			---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ALBERTA

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 56 14 41 N LONG 117 18 46 W
DRAINAGE AREA: 186 000 km²
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 68 100 000 TONNES FOR THE PERIOD APR 28 TO OCT 31

DAY	APR DAILY DISCHARGE (m³/s)		APR MEAN CONCENTRATION (mg/L)		APR DAILY LOAD (t)	MAY DAILY DISCHARGE (m³/s)		MAY MEAN CONCENTRATION (mg/L)		MAY DAILY LOAD (t)		JUN DAILY DISCHARGE (m³/s)		JUN MEAN CONCENTRATION (mg/L)		JUN DAILY LOAD (t)		DAY
1	1 560	B				2 100		664		120 000		5 090		3 430	S	1 510 000		1
2	1 360	B				2 110		654		119 000		6 070		3 770	S	1 980 000		2
3	1 120	B				2 080		644	S	116 000		6 670		3 300	S	1 900 000		3
4	1 450	B				2 010		619		107 000		5 900		2 980	S	1 520 000		4
5	1 700	B				1 880		570		92 600		4 920		2 570		1 090 000		5
6	1 600	B				1 960		579		98 100		5 060		1 870	S	818 000		6
7	1 430	B				1 980		682	S	117 000		4 500		1 340	S	521 000		7
8	1 400	B				2 250		855		166 000		4 240		1 230	S	451 000		8
9	1 370	B				2 780	1	130		271 000		4 070		1 150	S	404 000		9
10	1 230	B				2 960	1	100		281 000		3 980		740	S	254 000		10
11	1 580	B				2 800		955		231 000		3 760		541	S	176 000		11
12	1 810	B				2 620		615		139 000		6 160		2 670		1 420 000		12
13	1 970					2 650		410	S	93 900		16 100		11 40		15 900 000		13
14	1 840					2 260		339		66 200		16 500		9 450	S	13 500 000		14
15	1 450					2 120		329		60 300		11 200		5 720	S	5 540 000		15
16	1 650					2 490		390		83 900		7 970	A	4 290	S	2 950 000		16
17	1 710					2 520		393		85 600		6 370	A	2 570	S	1 410 000		17
18	1 720					2 650		415	S	95 000		5 450		2 380	S	1 120 000		18
19	1 560					2 730		376	S	88 700		4 690		1 870	S	758 000		19
20	1 210					2 870		390	S	96 700		4 400		1 320	S	502 000		20
21	1 430					2 800		616	S	149 000		3 630	A	1 050	S	329 000		21
22	1 800					2 710		591	S	138 000		3 520		951	S	289 000		22
23	2 030					3 130		687	S	186 000		3 300		933	S	266 000		23
24	2 080					3 060	1	740	S	460 000		3 260		849	S	239 000		24
25	2 450					3 120	1	670	S	450 000		3 000		804	S	208 000		25
26	2 640					3 200	1	750	S	484 000		2 810		774		188 000		26
27	2 770					3 280	2	280	S	646 000		2 930		682	S	173 000		27
28	2 590		1 350	S	302 000	4 170	2	870	S	1 030 000		2 920		600	S	151 000		28
29	2 460		885	S	188 000	4 280	2	290		847 000		2 870		445	S	110 000		29
30	2 380		799		164 000	4 230	A 1	720	S	629 000		2 700		336		78 400		30
31						4 290	A 2	840	S	1 050 000								31
TOTAL	53 350				654 000	86 090				8 597 000		164 040				55 755 400		

DAY	JUL DAILY DISCHARGE (m³/s)		JUL MEAN CONCENTRATION (mg/L)		JUL DAILY LOAD (t)	AUG DAILY DISCHARGE (m³/s)		AUG MEAN CONCENTRATION (mg/L)		AUG DAILY LOAD (t)		SEP DAILY DISCHARGE (m³/s)		SEP MEAN CONCENTRATION (mg/L)		SEP DAILY LOAD (t)		DAY
1	2 610		395	S	89 100	1 340		78		9 030		1 360		61	S	7 170		1
2	2 720		403	S	77 300	1 370		69	S	8 170		1 310		55	S	6 230		2
3	2 090		384	S	69 300	1 200		64		6 640		1 190		50		5 140		3
4	2 250		500	S	97 200	1 080		61	S	5 690		1 180		49		5 000		4
5	2 830		1 220	S	298 000	984		60		5 100		1 200		46		4 770		5
6	2 830		1 220	S	298 000	865		63	S	4 710		1 290		39	S	4 350		6
7	2 780		1 040		250 000	810		64		4 480		1 310		41	S	4 640		7
8	2 960		938	S	240 000	888		64		4 910		1 270		43		4 720		8
9	2 670		781		180 000	1 190		72		7 400		1 360		40		4 700		9
10	2 310		577	S	115 000	1 360		73	S	8 580		1 040		37		3 320		10
11	2 340		452		91 400	1 410		69	S	8 410		1 100		40		3 800		11
12	2 250		365	S	71 000	1 430		60		7 410		1 290		67		7 470		12
13	2 300		349		69 400	1 170		49		4 950		1 720		100		14 900		13
14	2 470		413	S	88 100	1 100		37	S	3 520		1 630		95	S	13 400		14
15	2 360		378		77 100	1 230		36		3 830		1 690		93		13 600		15
16	2 080		284		51 000	1 100		42		3 990		1 700		92		13 500		16
17	1 750		201	S	30 400	1 230		62		6 590		1 720		90		13 400		17
18	1 690		177	S	25 800	1 390		83		9 970		1 690		87	S	12 700		18
19	1 710		170		25 100	1 300		78		8 760		1 620		79		11 100		19
20	1 610		160		22 300	1 060		72		6 590		1 530		68	S	8 990		20
21	1 600		147		20 300	813		61		4 280		1 480		60		7 670		21
22	1 610		132		18 400	856		61	S	4 510		1 510		56		7 310		22
23	1 450		115	S	14 400	919		60		4 760		1 540		53		7 050		23
24	1 360		101	S	11 900	1 040		59		5 300		1 500		50	S	6 480		24
25	1 400		98	S	11 900	1 040		58		5 210		1 440		49		6 100		25
26	1 430		107		13 200	914		52		4 110		1 470		48		6 100		26
27	1 570		112	S	15 200	802		43		2 980		1 480		47		6 010		27
28	1 570		113		15 300	678		31		1 820		1 580		45		6 140		28
29	1 630		111	S	15 600	721		25	S	1 560		1 540		43		5 720		29
30	1 460		100		12 600	1 090		44		4 140		1 510		41		5 350		30
31	1 190		86	S	8 840	1 350		63		7 350								31
TOTAL	62 380				2 423 140	33 730				174 750		43 250				226 830		

A - MANUAL GAUGE B - ICE CONDITIONS S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

SUSPENDED SEDIMENT FOR 1990

DAY	OCT DAILY DISCHARGE (m^3/s)	OCT MEAN CONCENTRATION (mg/L)		OCT DAILY LOAD (t)	NOV DAILY DISCHARGE (m^3/s)	NOV MEAN CONCENTRATION (mg/L)	NOV DAILY LOAD (t)	DEC DAILY DISCHARGE (m^3/s)	DEC MEAN CONCENTRATION (mg/L)	DEC DAILY LOAD (t)	DAY
1	1 520	40		5 250							1
2	1 470	38	S	4 830							2
3	1 600	47		6 500							3
4	1 710	67	S	9 900							4
5	1 690	67		9 780							5
6	1 650	57	S	8 130							6
7	1 730	68	S	10 200							7
8	1 710	74		10 900							8
9	1 710	73	S	10 800							9
10	1 720	78		11 600							10
11	1 790	102	S	15 800							11
12	1 770	100		15 300							12
13	1 670	87		12 600							13
14	1 840	74		11 800							14
15	1 820	63		9 910							15
16	1 810	53		8 290							16
17	1 790	45	S	6 960							17
18	1 730	42	S	6 280							18
19	1 700	39	S	5 730							19
20	1 700	39		5 730							20
21	1 630	41		5 770							21
22	1 750	43		6 500							22
23	1 750	45	S	6 800							23
24	1 710	45		6 650							24
25	1 760	44		6 690							25
26	1 780	44		6 770							26
27	1 770	44		6 730							27
28	1 830	43		6 800							28
29	1 750	42		6 350							29
30	1 650	40	S	5 700							30
31	1 670	40		5 770							31
TOTAL	53 180			256 820							

S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)		DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 28	15:30	4.0	2670	224	D74	1413		178	28	38	54	65	80	90	94	99	100			10	52	38
APR 29	14:15	5.0	2590	224	D74	868																
MAY 01	16:30	6.0	2140	224	D74	646																
MAY 07	11:00	10.0	1960	224	D74	667		176	23	34	51	65	83	92	95	99	100			8	58	34
MAY 13	13:50	9.0	2720	224	D74	392	C	153														
MAY 18	11:00	12.0	2670	224	D74	419																
MAY 19	14:30	11.0	2700	224	D74	352																
MAY 20	13:00	12.0	2830	224	D74	337		161														
MAY 21	19:40	12.0	2550	224	D74	584																
MAY 22	18:00	12.0	2840	224	D74	604																
MAY 23	19:10	13.0	3100	224	D74	678																
MAY 24	07:45	14.0	3150	224	D74	1823																
MAY 25	18:30	13.0	3180	224	D74	1677		183	10	15	23	32	51	75	97	100				25	60	15
MAY 26	18:30	13.0	3050	224	D74	1674																
MAY 27	19:15	14.0	3510	224	D74	2696																
MAY 28	18:30	14.0	4330	224	D74	2793		160	18	23	35	44	62	79	93	99	100			21	56	23
MAY 30	20:20	14.0	4260	224	D74	1532																
MAY 31	15:00	10.0	4290	224	D74	3364																
JUN 01	14:30	10.5	5260	224	D74	3389																
JUN 02	16:15	11.0	6140	224	D74	3905		166	15	19	29	37	53	75	98	100				25	56	19
JUN 03	14:15	11.0	6710	224	D74	3097																
JUN 04	15:00	11.0	5800	224	D74	3021		197	22	33	46	57	74	89	96	99	100			11	56	33
JUN 06	17:20	12.0	5080	224	D74	1666		160	18	23	35	44	61	77	90	99	100			23	54	23
JUN 07	17:15	14.0	4430	224	D74	1277																
JUN 08	17:15	15.0	4230	224	D74	1418		185														
JUN 08	17:16	15.0	4230	224	D74	1051		158														
JUN 09	17:00	15.5	3990	224	D74	1146	C															
JUN 10	15:30	14.0	3960	224	D74	645	C															
JUN 11	17:20	12.0	3650	224	D74	521	C															
JUN 14	18:00		15500	224	D74	8314		202														
JUN 14	18:01		15500	224	D74	8628		206														
JUN 15	17:15	13.0	10100	224	D74	4817	G	266														
JUN 15	17:16	13.0	10100	224	D74	4924		189														
JUN 16	17:15	14.0	7410	224	D74	4230		175	19	28	47	48	74	86	94	99	100			14	58	28
JUN 17	15:15	15.0	6210	224	D74	2168		197														
JUN 18	15:15	15.5	5390	224	D74	2394		222	15	19	28	37	53	71	91	95	100			29	52	19
JUN 19	21:00	15.0	4600	224	D74	1621	C															
JUN 20	09:15	16.0	4570	224	D74	1341	C															
JUN 21	17:15	17.0	3560	224	D74	1002	C															
JUN 22	17:15	18.0	3520	224	D74	941	C															
JUN 23	06:00	16.5	3750	224	D74	940	C															
JUN 24	15:00	17.5	3310	224	D74	817	C															
JUN 25	15:45	18.0	3000	224	D74	807		156														
JUN 27	09:00	16.5	2990	224	D74	606	C															
JUN 28	21:30	18.0	2790	224	D74	577	C															
JUN 29	16:30	18.0	2900	224	D74	394	C															
JUL 01	15:30	17.5	2690	224	D74	453	C															
JUL 02	13:15	17.0	2160	224	D74	396		161														
JUL 03	16:10	17.0	2100	224	D74	388	C															
JUL 04	11:25	16.0	2220	224	D74	405	C															
JUL 05	16:20	16.0	2920	224	D74	1371		198														
JUL 06	11:45	16.0	2840	224	D74	1215		171	26	33	48	57	73	82	90	98	100			18	49	33
JUL 08	13:30	18.0	3080	224	D74	941	C															
JUL 10	17:00	19.0	2260	224	D74	528	C															
JUL 12	12:00	21.0	2290	224	D74	357	C															
JUL 14	16:10	19.0	2560	224	D74	430		142														
JUL 17	13:40	18.0	1690	224	D74	190	C															
JUL 18	16:10	18.0	1750	224	D74	176		179														
JUL 23	17:45	20.5	1500	224	D74	112		364														
JUL 24	16:10	21.0	1300	224	D74	96	C															
JUL 25	16:15	21.5	1460	224	D74	98	C															
JUL 27	11:00	20.0	1610	224	D74	111	C															
JUL 29	17:15	21.0	1730	224	D74	111		154														
JUL 31	10:40	21.0	1120	224	D74	85	C															
AUG 02	19:00	20.0	1470	224	D74	66																
AUG 04	17:40	21.0	1040	224	D74	60																
AUG 06	16:15	21.0	825	224	D74	64		163														
AUG 10	13:10	20.0	1370	224	D74	62																
AUG 10	14:45	20.0	1450	224	D74	83																
AUG 11	14:45	21.5	1480	224	D74	69																
AUG 14	10:50	18.5	1020	224	D74	36		149														
AUG 22	14:45	19.0	825	224	D74	60		150														
AUG 29	09:00	15.0	657	224	D74	24																
SEP 01	16:15	14.0	1400	224	D74	60		139														
SEP 02	19:20	14.5	1340	224	D74	52																
SEP 06	15:10	15.0	1350	224	D74	37																
SEP 07	16:20	14.0	1400	224	D74	43		139														
SEP 14	15:00	15.0	1660	224	D74	94		144														
SEP 18	18:00	15.0	1700	224	D74	86																
SEP 20	15:00	14.0	1600	224	D74	66		141														
SEP 24	16:50	15.5	1530	224	D74	50																
OCT 02	18:40	11.0	1510	224	D74	38		124														
OCT 04	16:20	9.5	1760	224	D74	71																
OCT 06	09:45	8.5	1650	224	D74	55																
OCT 07	13:00	8.5	1790	224	D74	71																
OCT 09	16:00	10.0	1780	224	D74	72		125														
OCT 11	15:00	9.0	1840	224	D74	107		117														
OCT 17	15:25	7.5	1790	224	D74	43		122														
OCT 18	16:00	8.0	1730	224	D74	42																
OCT 19	16:10	7.0	1730	224	D74	38																
OCT 23	18:45	7.0	1710	224	D74	45		110														
OCT 30	17:40	7.0	1690	224	D74	40																

NOTE: SINGLE VERTICAL IS LOCATED AT 224 METRES FOR 1990

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT G - ORGANIC MATERIAL PRESENT

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1966	-----CCCCC--	MANUAL	4 350	AUG 30	15	OCT 24	1 080 000	AUG 30	12 900 000	---	---	---
1967	----PCCCCCCC	MANUAL	4 820	JUN 3	9	NOV 15	1 440 000	JUN 4	31 600 000	---	---	---
1968	CCC-CCCCC--	MANUAL	7 110	JUN 14	4	FEB 25	3 800 000	JUN 14	18 700 000	---	---	---
1969	CCC-CCCCCCCC	MANUAL	5 220	MAY 2	6	JAN 1	1 630 000	MAY 2	12 600 000	---	---	---
1970	CCCCCCCCCCCC	MANUAL	2 690	APR 18	6	SEP 21	827 000	JUN 5	16 500 000	45 200	45 200	---
1971	CCCCCCCCCCCC	MANUAL	6 930	JUN 18	6	NOV 15	5 340 000	JUN 18	58 100 000	159 000	102 000	55.8
1972	CCCCCCCCCCCC	MANUAL	12 000	JUN 14	3	MAR 15	14 600 000	JUN 14	76 300 000 *	209 000	138 000	35.2
1973	CCCCCCCCCCCC	MANUAL	4 050	APR 14	1	SEP 10 *	1 120 000	APR 14	31 500 000	86 300	125 000	29.3
1974	CCCCCCCCCCCC	MANUAL	6 400	APR 26	10	DEC 30	4 030 000	APR 26	59 000 000	162 000	132 000	22.1
1975	CCCCCCCCCCCC	MANUAL	3 850	JUL 1	5	JAN 3	1 370 000	JUL 1	16 800 000	46 100	118 000	23.6
1976	CCCCCCCCCCCC	MANUAL	5 000	AUG 19	5	JAN 7	2 430 000	AUG 19	51 900 000	142 000	121 000	19.6
1977	CCCCCCCCCCCC	MANUAL	6 990	MAY 7	19	SEP 27	3 290 000	JUN 11	42 400 000	116 000	121 000	17.1
1978	-PP-CCCCC--P	MANUAL	3 020	JUL 13	2	SEP 5	794 000	JUN 17	11 100 000	---	---	---
1979	---P-PCC-PCP-	MANUAL	4 160	MAY 18	10	MAR 29	1 430 000	MAY 18	23 200 000	---	---	---
1980	--PPCCCCCC--	MANUAL	4 730	JUN 6	7	MAR 13	1 920 000	JUN 6	17 700 000	---	---	---
1981	PPP-CCCCCC--	MANUAL	7 410	MAY 8	12	JAN 27	1 710 000	MAY 9	18 800 000	---	---	---
1982	--P-CCCC--P-	MANUAL	9 140	AUG 4	25	NOV 1	4 760 000	JUL 17	40 300 000	---	---	---
1983	-----CCPPCC--	MANUAL	5 240	JUN 22	4	OCT 23	1 990 000	JUL 17	25 300 000	---	---	---
1984	--PPPPPP-----	MANUAL	901	MAY 13	22	MAR 16	---	---	---	---	---	---
1985	---PCCCCCP-	MANUAL	931	MAY 23	12	SEP 4	279 000	MAY 23	8 090 000	---	---	---
1986	--P-CCCCCC--	MANUAL	4 010	MAY 29	13	OCT 30	1 580 000	MAY 29	22 600 000	---	---	---
1987	---PCCCCCC--	MANUAL	12 600	AUG 3 *	16	SEP 29	12 600 000	AUG 3	49 700 000	---	---	---
1988	---PCCCCCC--	MANUAL	3 770	MAY 18	9	OCT 29	1 140 000	MAY 18	17 300 000	---	---	---
1989	----CCCCCP-	MANUAL	4 620	MAY 22	11	OCT 20	1 250 000	MAY 22	23 200 000	---	---	---
1990	---PCCCCCC--	MANUAL	11 400	JUN 13	24	AUG 29	15 900 000	JUN 13 *	68 000 000	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PEIGAN CREEK NEAR PAKOWKI ROAD - STATION NO. 05AH041

LOCATION: LAT 49 34 50 N LONG 110 56 30 W
DRAINAGE AREA: 440 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	18	MAY 19	18	MAY 19	---	---	---	---	---	---
1976	--PPP-------	MANUAL	302	MAR 19	0	MAY 10 *	---	---	---	---	---	---
1978	--PPP-P-----	MANUAL	393	APR 6	4	MAY 30	---	---	---	---	---	---
1979	--PPP-------	MANUAL	441	MAR 15	10	MAY 2	---	---	---	---	---	---
1980	--PP--------	MANUAL	116	MAR 19	14	APR 6	---	---	---	---	---	---
1981	--P---------	MANUAL	22	MAR 10	22	MAR 10	---	---	---	---	---	---
1982	-----P------	MANUAL	127	JUN 4	127	JUN 4	---	---	---	---	---	---
1985	--PPP-------	MANUAL	1 320	APR 2 *	21	MAY 1	---	---	---	---	---	---
1986	-PPPPP--PP--	MANUAL	1 030	SEP 26	5	JUN 8	---	---	---	---	---	---
1987	--PP--------	MANUAL	1 070	MAR 5	19	APR 9	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PEKISKO CREEK NEAR LONGVIEW - STATION NO. 05BL023

LOCATION: LAT 50 28 26 N LONG 114 12 20 W
DRAINAGE AREA: 232 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	3 590	JUN 6 *	20	MAY 24	---	---	---	---	---	---
1972	---PP-------	MANUAL	1 280	MAY 25	17	APR 11	---	---	---	---	---	---
1976	----P-------	MANUAL	21	MAY 13	21	MAY 13	---	---	---	---	---	---
1977	----P-------	MANUAL	13	MAY 17	11	MAY 24 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PEMBINA RIVER AT JARVIE - STATION NO. 07BC002

LOCATION: LAT 54 27 05 N LONG 113 59 30 W
DRAINAGE AREA: 13 100 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PP-P-P---	MANUAL	534	APR 14			19	SEP 24			---	---	---	---	---	---
1977	---PPPP-P---	MANUAL	2 120	MAY 11			60	SEP 26			---	---	---	---	---	---
1978	---PPP-PP-P-	MANUAL	812	JUN 10			11	AUG 31			---	---	---	---	---	---
1979	---PPPPPP---	MANUAL	1 600	APR 26			11	SEP 19			---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	2 530	APR 17			41	OCT 17			---	---	---	---	---	---
1981	---PPPPPPP--	MANUAL	423	APR 10			4	OCT 5			---	---	---	---	---	---
1982	------P-P----	MANUAL	439	AUG 30			220	JUN 11			---	---	---	---	---	---
1983	-----PPPP-P--	MANUAL	1 030	MAY 9			11	OCT 31			---	---	---	---	---	---
1984	----PPP-PP---	MANUAL	426	JUN 11			3	SEP 4	*		---	---	---	---	---	---
1985	---PPPPPP---	MANUAL	1 990	APR 10			14	JUL 30			---	---	---	---	---	---
1986	---PPPPPP-P-	MANUAL	309	JUN 2			46	SEP 22			---	---	---	---	---	---
1987	---PPPPPP---	MANUAL	207	AUG 18			8	SEP 22			---	---	---	---	---	---
1988	---PPPPPPP--	MANUAL	296	JUL 18			4	MAY 24			---	---	---	---	---	---
1989	---PPPPPPP--	MANUAL	2 550	AUG 7	*		43	OCT 30			---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PEMBINA RIVER NEAR ENTWISTLE - STATION NO. 07BB002

LOCATION: LAT 53 36 18 N LONG 115 00 14 W
DRAINAGE AREA: 4 420 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUN 06	10:40	14.0	192	48.0	DH59	1037	153	15	17	30	37	51	64	76	93	99	100		36	47	17
JUL 05	14:30	14.0	359	48.0	DH59	2193	160	10	13	22	29	43	56	67	90	99	100		44	43	13

NOTE: SINGLE VERTICAL IS LOCATED AT 48.0 METRES FOR 1990

PEMBINA RIVER NEAR ENTWISTLE - STATION NO. 07BB002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	----P-------	MANUAL	15	MAY 30			15	MAY 30			---	---	---	---	---	---
1974	------PPPP--	MANUAL	17	JUL 23			2	OCT 29	*		---	---	---	---	---	---
1975	-----PPPPP---	MANUAL	51	MAY 15			3	AUG 19			---	---	---	---	---	---
1976	---PPPPP-----	MANUAL	23	AUG 19			7	JUL 19			---	---	---	---	---	---
1977	----PPPPP----	MANUAL	128	MAY 8			10	JUN 23			---	---	---	---	---	---
1978	----PPPP-----	MANUAL	333	JUN 19			9	AUG 21			---	---	---	---	---	---
1979	-----PPPP----	MANUAL	11	JUN 11			6	AUG 13			---	---	---	---	---	---
1980	---PPPPP-----	MANUAL	353	APR 14			10	AUG 18			---	---	---	---	---	---
1981	---PP-PP-----	MANUAL	159	MAY 11			9	JUL 6			---	---	---	---	---	---
1982	-----PP-PP---	MANUAL	78	JUL 26			2	SEP 27			---	---	---	---	---	---
1983	---P-P-PPP---	MANUAL	199	JUN 27			2	SEP 28			---	---	---	---	---	---
1984	---P--P-P----	MANUAL	46	SEP 10			6	JUL 4			---	---	---	---	---	---
1985	---PPPPPPPP-	MANUAL	202	APR 12			3	JUL 16			---	---	---	---	---	---
1986	---PPPPPPP-	MANUAL	3 140	JUL 21	*		7	JUN 11			---	---	---	---	---	---
1987	---PPPPP-P-	MANUAL	388	APR 14			9	NOV 3			---	---	---	---	---	---
1988	---P-PPPPP---	MANUAL	28	JUL 20			3	JUN 1			---	---	---	---	---	---
1989	----PPPPP-P-	MANUAL	2 630	AUG 5			8	NOV 1			---	---	---	---	---	---
1990	-----PP-----	MANUAL	2 190	JUL 5			1 040	JUN 6			---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PINCHER CREEK AT PINCHER CREEK - STATION NO. 05AA004

LOCATION: LAT 49 29 12 N LONG 113 56 49 W
DRAINAGE AREA: 155 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	858	MAY 6	27	MAY 4 *	---	---	---	---	---	---
1972	--P-PP------	MANUAL	2 050	MAY 25 *	37	MAR 24	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PINE CREEK NEAR GRASSLAND - STATION NO. 07CA005

LOCATION: LAT 54 49 12 N LONG 112 46 34 W
DRAINAGE AREA: 1 450 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	--------PP---	MANUAL	51	AUG 13	48	SEP 17	---	---	---	---	---	---
1975	---P--PPP---	MANUAL	199	APR 21	16	APR 15	---	---	---	---	---	---
1976	---PPPPPP--	MANUAL	863	APR 12 *	9	JUN 15	---	---	---	---	---	---
1977	----PPPPP--	MANUAL	54	JUN 7	21	AUG 10	---	---	---	---	---	---
1978	----PPPPPP--	MANUAL	204	JUN 2	41	JUN 27	---	---	---	---	---	---
1979	----PPPPP--	MANUAL	118	MAY 2	15	OCT 31	---	---	---	---	---	---
1980	---PPPPP---	MANUAL	92	SEP 25	23	JUN 4	---	---	---	---	---	---
1981	---PPPP-P---	MANUAL	68	APR 21	6	SEP 29 *	---	---	---	---	---	---
1982	------PPP----	MANUAL	35	AUG 4	12	JUN 7	---	---	---	---	---	---
1983	--------P----	MANUAL	20	AUG 9	20	AUG 9	---	---	---	---	---	---
1984	----PPPPP---	MANUAL	45	JUN 7	6	SEP 6	---	---	---	---	---	---
1985	---PPPPP----	MANUAL	342	APR 9	9	AUG 27	---	---	---	---	---	---
1986	---PPPPPP---	MANUAL	42	JUN 3	20	MAY 6	---	---	---	---	---	---
1987	---PPPP-----	MANUAL	87	APR 14	19	MAY 5	---	---	---	---	---	---
1988	-----PPP-----	MANUAL	17	JUN 7	6	MAY 17	---	---	---	---	---	---
1989	-----PPPP--P-	MANUAL	19	JUN 20	9	NOV 7	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PIPESTONE RIVER NEAR LAKE LOUISE - STATION NO. 05BA002

LOCATION: LAT 51 26 02 N LONG 116 10 20 W
DRAINAGE AREA: 306 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-AUG MEAN LOAD (TONNES)	SUMMARY : MAY-AUG HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-AUG STANDARD ERROR OF MEAN %
1972	-----PPP-----	MANUAL	74	JUL 8 *	2	AUG 5	---	---	---	---	---	---
1973	----CCCC----	MANUAL	73	JUN 24	1	JUL 25 *	250	JUN 24 *	1 580 *	12.8	12.8	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PIYAMI DRAIN NEAR PICTURE BUTTE - STATION NO. 05AD037

LOCATION: LAT 49 49 49 N LONG 112 45 43 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1978	------P-----	MANUAL	247 JUL 11 *	247 JUL 11 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PONTON RIVER ABOVE BOYER RIVER - STATION NO. 07JF003

LOCATION: LAT 58 27 53 N LONG 116 15 23 W
DRAINAGE AREA: 2 440 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1975	---PP-------	MANUAL	1 880 APR 29	36 APR 22	--- ---	---	---	---	---
1976	---PPPPPP--	MANUAL	3 420 APR 28	19 OCT 27	--- ---	---	---	---	---
1977	---P-PP-PP--	MANUAL	1 050 APR 28	13 OCT 6	--- ---	---	---	---	---
1978	----PPPP-P--	MANUAL	459 MAY 9	20 AUG 3	--- ---	---	---	---	---
1979	----PPPPP-P-	MANUAL	2 200 MAY 18	7 SEP 27	--- ---	---	---	---	---
1980	-----PPP----	MANUAL	50 JUL 3	5 AUG 8 *	--- ---	---	---	---	---
1981	----PP-PPP--	MANUAL	393 MAY 27	7 SEP 8	--- ---	---	---	---	---
1982	----PPPP-P--	MANUAL	2 740 MAY 4	6 AUG 25	--- ---	---	---	---	---
1983	----PP-PPP--	MANUAL	321 MAY 5	6 SEP 1	--- ---	---	---	---	---
1984	----PPPPP---	MANUAL	5 070 JUL 4	27 MAY 4	--- ---	---	---	---	---
1985	----PPPPPP--	MANUAL	726 JUL 23	23 OCT 30	--- ---	---	---	---	---
1986	----PPPPP---	MANUAL	3 540 MAY 12	33 SEP 23	--- ---	---	---	---	---
1987	----PPPPP---	MANUAL	5 770 MAY 4 *	64 AUG 26	--- ---	---	---	---	---
1988	---PPPPPP-P-	MANUAL	2 710 MAY 6	18 NOV 3	--- ---	---	---	---	---
1989	----PPPPP-P-	MANUAL	3 090 MAY 3	20 NOV 2	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

POPLAR CREEK NEAR FORT MCMURRAY - STATION NO. 07DA007

LOCATION: LAT 56 54 50 N LONG 111 27 35 W
DRAINAGE AREA: 151 km²
TYPE OF FLOW: REGULATED SINCE 1976
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	---------P--	MANUAL	4 OCT 7	4 OCT 7	--- ---	---	---	---	---
1975	---PPPPP----	MANUAL	362 MAY 26	22 JUN 2	--- ---	---	---	---	---
1976	CCCCCCCCCCCC	MANUAL	542 APR 8 *	0 JAN 1 *	393 AUG 30	2 540	12.2	12.2	---
1977	---CCCCCCC--	MANUAL	71 APR 20	5 SEP 17	28.5 APR 20	701	3.27	7.72	57.6
1978	---CCCCCC--	MANUAL	397 SEP 12	2 APR 1	521 SEP 12 *	4 330 *	20.2	11.9	41.2
1979	---PPPPPPP--	MANUAL	136 APR 23	10 OCT 19	--- ---	---	---	---	---
1980	---PPPPPPP--	MANUAL	54 APR 21	5 OCT 20	--- ---	---	---	---	---
1981	----P-PP----	MANUAL	21 MAY 22	13 AUG 26	--- ---	---	---	---	---
1982	-----P-PP---	MANUAL	9 JUN 21	3 SEP 19	--- ---	---	---	---	---
1983	---P-P-P----	MANUAL	10 APR 20	6 AUG 1	--- ---	---	---	---	---
1984	----PP-PP---	MANUAL	51 JUN 25	11 AUG 7	--- ---	---	---	---	---
1985	---P-P-P----	MANUAL	62 APR 26	11 JUN 13	--- ---	---	---	---	---
1986	----PP-P----	MANUAL	26 MAY 12	3 AUG 25	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PRAIRIE CREEK NEAR ROCKY MOUNTAIN HOUSE - STATION NO. 05DB002

LOCATION: LAT 52 16 20 N LONG 114 55 50 W
DRAINAGE AREA: 859 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----P-----	MANUAL	679 JUN 7 *	35 JUN 5 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PRAIRIE RIVER NEAR LAKE CLAIRE - STATION NO. 07KF014

LOCATION: LAT 58 37 25 N LONG 111 40 50 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	------PPP---	MANUAL	406 AUG 4	70 AUG 19	--- ---	---	---	---	---
1972	-------P----	MANUAL	30 AUG 1	13 AUG 22 *	--- ---	---	---	---	---
1976	----PPPPPP--	MANUAL	392 MAY 19	91 SEP 14	--- ---	---	---	---	---
1977	----PPPPPP--	MANUAL	655 MAY 30 *	37 JUL 26	--- ---	---	---	---	---
1978	-----PPPPP--	MANUAL	311 JUL 27	32 AUG 22	--- ---	---	---	---	---
1979	-----PPPP---	MANUAL	117 JUL 18	29 AUG 16	--- ---	---	---	---	---
1980	-----PP-----	MANUAL	105 JUL 24	25 JUL 14	--- ---	---	---	---	---
1981	-----P-P----	MANUAL	139 JUN 9	40 AUG 7	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

RACEHORSE CREEK NEAR THE MOUTH - STATION NO. 05AA027

LOCATION: LAT 49 50 18 N LONG 114 25 06 W
DRAINAGE AREA: 217 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	150 JUN 6	28 MAY 23	--- ---	---	---	---	---
1972	----PP------	MANUAL	1 140 MAY 31 *	28 MAY 27 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

RAM RIVER NEAR THE MOUTH - STATION NO. 05DC006

LOCATION: LAT 52 21 55 N LONG 115 25 33 W
DRAINAGE AREA: 1 860 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 27	09:00	5.0	141	40.0	DH59	1730	165	15	19	34	43	63	75	87	98	100			25	56	19
MAY 29	09:20	7.0	100	40.0	DH59	910	176	16	23	43	53	72	85	95	99	100			15	62	23
JUN 27	09:30	11.0	62.4	40.0	DH59	118	190														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

RAM RIVER NEAR THE MOUTH - STATION NO. 05DC006

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PPPPPP---	MANUAL	356	AUG 12	12	APR 26	---	---	---	---	---	---
1977	---PPPPPP---	MANUAL	242	MAY 26	11	SEP 15	---	---	---	---	---	---
1978	---PPPPPPP--	MANUAL	364	MAY 23	4	SEP 26	---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	43	MAY 22	0	AUG 14 *	---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	1 500	JUN 6	8	OCT 29	---	---	---	---	---	---
1981	---PPP-PPP--	MANUAL	142	MAY 28	1	SEP 28	---	---	---	---	---	---
1982	----PPP-PP--	MANUAL	885	JUL 6	1	SEP 14	---	---	---	---	---	---
1983	----PPPPP---	MANUAL	1 330	MAY 30	2	SEP 27	---	---	---	---	---	---
1984	---PPPPPP---	MANUAL	39	JUN 20	1	AUG 20	---	---	---	---	---	---
1985	-----PPPP---	MANUAL	164	AUG 22	16	JUL 16	---	---	---	---	---	---
1986	----PPPPP-P-	MANUAL	2 490	MAY 27 *	4	SEP 21	---	---	---	---	---	---
1987	---P-PPP-P--	MANUAL	315	JUL 30	2	OCT 5	---	---	---	---	---	---
1988	----PPPPPP--	MANUAL	438	JUN 10	4	MAY 5	---	---	---	---	---	---
1989	----PPPPP-P-	MANUAL	741	JUL 12	2	MAY 1	---	---	---	---	---	---
1990	----PP------	MANUAL	1 730	MAY 27	118	JUL 27	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

RAY CREEK NEAR INNISFAIL - STATION NO. 05CE010

LOCATION: LAT 52 00 03 N LONG 113 35 55 W
DRAINAGE AREA: 42.5 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	107	JUN 24 *	7	MAY 22 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER AT DRUMHELLER - STATION NO. 05CE001

LOCATION: LAT 51 28 08 N LONG 112 42 30 W
DRAINAGE AREA: 24 800 km²
TYPE OF FLOW: REGULATED SINCE 1983
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
APR 04	12:30	1.0	246	60.0	DH59	1508	197	10	17	26	32	49	65	82	97	100			35	48	17
JUN 06	12:50	12.0	713	60.0	DH59	1085	210	22	31	44	54	69	79	88	98	100			21	48	31
JUN 07	10:20	11.0	508	60.0	DH59	764	251	19	28	41	50	64	72	81	97	100			28	44	28

NOTE: SINGLE VERTICAL IS LOCATED AT 60 METRES FOR 1990

RED DEER RIVER AT DRUMHELLER - STATION NO. 05CE001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1975	-PPCCCCCCCCC	MANUAL	6 300	MAY 5	0	FEB 21 *	116 000	APR 21	606 000	---	---	---
1976	PPPCCCCCCCPP	MANUAL	3 260	JUN 13	3	OCT 1	18 400	APR 12	184 000	---	---	---
1977	CCCCCCCCCCCC	MANUAL	5 730	MAY 23	2	DEC 28	56 800	MAY 23	392 000	1 590	1 590	---
1978	CCCCCCCCCCCC	MANUAL	7 700	SEP 8	2	JAN 1	40 100	SEP 8	655 000	2 670	2 130	25.1
1979	CCCCCCCCCC--	MANUAL	3 970	JUL 23	1	AUG 20	18 000	JUL 23	110 000	447	1 570	40.8
1980	--CCCCCCCC--	MANUAL	6 900	JUL 29	2	MAY 15	49 500	AUG 6	833 000	3 400	2 030	31.8
1981	--PCCCCCCCP-	MANUAL	17 900	MAY 7 *	4	OCT 4	148 000	AUG 1 *	1 220 000 *	---	---	---
1982	--CCCCCCCC--	MANUAL	3 350	JUL 2	5	SEP 23	78 300	JUL 8	858 000	3 500	2 320	25.0
1983	---CCCCCCC--	MANUAL	6 180	AUG 12	1	OCT 11	64 000	JUL 8	423 000	---	---	---
1984	---CCCCCCC--	MANUAL	2 500	JUN 9	5	AUG 29	7 170	JUN 9	110 000	---	---	---
1985	---PPPPPPP--	MANUAL	1 450	APR 5	5	JUL 16	---	---	---	---	---	---
1986	---PPPPPPPP-	MANUAL	1 320	AUG 12	8	APR 21	---	---	---	---	---	---
1987	---PPPPPPPP-	MANUAL	1 060	APR 7	8	MAY 20	---	---	---	---	---	---
1988	---PPPPPP-P-	MANUAL	524	APR 11	11	MAY 4	---	---	---	---	---	---
1989	---PPPPPPP--	MANUAL	1 080	AUG 29	11	SEP 26	---	---	---	---	---	---
1990	---P-P------	MANUAL	1 510	APR 4	764	JUN 7	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER AT RED DEER - STATION NO. 05CC002

LOCATION: LAT 52 16 36 N LONG 113 48 57 W
DRAINAGE AREA: 11 600 km²
TYPE OF FLOW: REGULATED SINCE 1983
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 03	16:00	11.0	828	1QLB	D49	1393	210	10	16	24	30	46	57	74	95	100			43	41	16

NOTE: SINGLE VERTICAL LOCATED AT 1QLB (ONE QUARTER THE DISTANCE FROM THE LEFT BANK) FOR 1990

RED DEER RIVER AT RED DEER - STATION NO. 05CC002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1970	-----PP-----	MANUAL	103	JUN 4	12	JUL 17	---	---	---	---	---	---
1971	--CCCCCCCCCC	MANUAL	1 570	APR 15	0	OCT 12 *	41 400	APR 15	274 000	1 320	1 320	---
1972	CCCCCCCCCCCC	MANUAL	2 750	JUN 26	0	AUG 29	154 000	JUN 26 *	505 000	2 410	1 860	29.3
1973	CCCCCCCCCCCC	MANUAL	1 450	MAY 28	2	DEC 11	31 700	MAY 28	222 000	1 010	1 580	27.0
1974	--CCCCCCCC--	MANUAL	1 460	APR 16	1	OCT 26	28 600	JUN 18	352 000	1 650	1 590	18.9
1975	--PCCCCCCC--	MANUAL	426	APR 21	1	APR 1	7 490	APR 20	56 800	265	1 330	26.6
1976	--CCCCCCCCC-	MANUAL	649	AUG 11	1	OCT 30	7 140	AUG 11	50 400	213	1 150	29.8
1977	---CCCCCCCCC	MANUAL	440	APR 8	1	DEC 5	3 800	APR 8	52 000	242	1 020	31.1
1978	CCCCCCCCCCCC	MANUAL	1 370	JUN 7	0	MAY 7	21 900	JUN 7	131 000	589	963	29.0
1979	PP-CCCCCCCP-	MANUAL	759	MAY 28	1	OCT 2	7 480	MAY 28	47 500	222	881	29.5
1980	--CCCCCCCC--	MANUAL	1 280	APR 16	3	MAR 1	16 900	APR 16	142 000	662	859	27.1
1981	---CCCCCCC--	MANUAL	3 130	JUL 31 *	4	APR 17	148 000	JUL 31	740 000 *	3 460	1 090	28.9
1982	---CCCCCCC--	MANUAL	909	JUL 6	2	OCT 24	19 500	JUL 6	206 000	963	1 080	26.7
1983	---CCCCCCC--	MANUAL	906	APR 26	2	AUG 13	10 400	APR 27	48 400	226	1 020	26.9
1984	--PCCCCCCC--	MANUAL	65	SEP 25	2	JUN 5	235	SEP 23	6 350	29.0	947	27.8
1985	---PPPPPPPP-	MANUAL	143	SEP 13	2	MAY 28	---	---	---	---	---	---
1986	---PPPPPPPP-	MANUAL	524	MAY 21	3	NOV 4	---	---	---	---	---	---
1987	-----PPP-P-P-	MANUAL	14	JUN 2	4	NOV 5	---	---	---	---	---	---
1988	--PPPPPPPPP-	MANUAL	38	JUL 7	2	SEP 14	---	---	---	---	---	---
1989	---PPPPPPPP-	MANUAL	154	APR 13	1	SEP 28	---	---	---	---	---	---
1990	-----P------	MANUAL	1 390	JUN 3	1 390	JUN 3	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER AT SUNDRE - STATION NO. 05CA010

LOCATION: LAT 51 47 45 N LONG 114 38 05 W
DRAINAGE AREA: 3 460 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PPPPP----	MANUAL	247 MAY 11 *		5 APR 22 *		---	---	---	---	---	---
1977	---PPP------	MANUAL	142 APR 6		17 MAY 19		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER BELOW BURNT TIMBER CREEK - STATION NO. 05CA009

LOCATION: LAT 51 38 46 N LONG 115 01 05 W
DRAINAGE AREA: 2 250 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUN 04	13:35	7.0	187	1QLB	D49	623 C	171														
JUN 06	14:15	7.0	119	1QLB	D49	98	204														

NOTE: SINGLE VERTICAL IS LOCATED AT 63.0 METRES FOR 1990

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

RED DEER RIVER BELOW BURNT TIMBER CREEK - STATION NO. 05CA009

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	------P-P---	MANUAL	43 JUL 29		8 SEP 3		---	---	---	---	---	---
1975	----P-P-----	MANUAL	24 JUL 31		2 MAY 29		---	---	---	---	---	---
1976	----PPP-----	MANUAL	166 JUL 1		3 MAY 18		---	---	---	---	---	---
1977	-----PPP----	MANUAL	179 JUN 2		7 AUG 10		---	---	---	---	---	---
1978	----PPP-PP--	MANUAL	730 JUN 5		4 SEP 5		---	---	---	---	---	---
1979	----PPPP-P--	MANUAL	342 AUG 21		2 OCT 2		---	---	---	---	---	---
1980	----PPPPP---	MANUAL	81 JUN 9		3 SEP 25		---	---	---	---	---	---
1981	----PP-PP---	MANUAL	107 AUG 25		3 SEP 29		---	---	---	---	---	---
1982	----P-PPPP--	MANUAL	15 JUL 5		1 OCT 28		---	---	---	---	---	---
1983	---PP-PPP---	MANUAL	386 MAY 30		0 SEP 27 *		---	---	---	---	---	---
1984	----P-PP-P--	MANUAL	23 AUG 3		3 JUL 10		---	---	---	---	---	---
1985	---PPPPPPP--	MANUAL	61 SEP 14		3 APR 29		---	---	---	---	---	---
1986	---PPPPPPPP-	MANUAL	1 050 MAY 29 *		1 APR 9		---	---	---	---	---	---
1987	---PPPPPPPP-	MANUAL	456 JUL 22		2 OCT 7		---	---	---	---	---	---
1988	----PPPP----	MANUAL	25 AUG 29		8 MAY 18		---	---	---	---	---	---
1989	----PPP-----	MANUAL	127 JUN 14		7 MAY 16		---	---	---	---	---	---
1990	-----P------	MANUAL	623 JUN 4		98 JUN 6		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER NEAR BINDLOSS - STATION NO. 05CK004

LOCATION: LAT 50 54 10 N LONG 110 17 50 W
DRAINAGE AREA: 44 700 km²
TYPE OF FLOW: REGULATED SINCE 1908
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1966	----CCCCCCEC	MANUAL	17 000 JUL 6 *		30 NOV 4		298 000 JUL 7		1 850 000	---	---	---
1967	CCCCCCCCCCCC	MANUAL	5 000 JUN 4		2 JAN 22		200 000 JUN 4		2 410 000	9 810	9 810	---
1968	CCCCCCCCCCCC	MANUAL	6 780 JUL 26		11 DEC 9		70 300 JUL 26		843 000	3 420	6 610	48.3
1969	CCCCCCCCCCCC	MANUAL	7 080 APR 7		1 MAR 10		377 000 APR 9		4 710 000	19 200	10 800	42.4
1970	CCCCCCCCCCCC	MANUAL	12 200 JUN 18		11 MAR 19		345 000 JUN 18		2 930 000	11 900	11 100	29.3
1971	CCCCCCCCCCCC	MANUAL	7 710 APR 16		10 NOV 12		517 000 APR 16	*	4 610 000	18 800	12 600	23.4
1972	CCCCCCCCCCCC	MANUAL	4 780 JUN 28		0 DEC 30	*	195 000 JUN 29		1 600 000	6 500	11 600	22.6
1973	CCCCCCCCCCCC	MANUAL	8 470 JUN 19		1 JAN 1		122 000 JUN 19		1 570 000	6 400	10 900	21.5
1974	CCCCCCCCCCCC	MANUAL	8 700 APR 16		5 FEB 19		344 000 APR 19		5 280 000	* 21 500	12 200	19.9
1975	CCCCCCCCCCCC	MANUAL	4 790 APR 24		11 JAN 1		155 000 APR 24		1 140 000	4 640	11 400	20.2
1976	CCCCCCCCCCCC	MANUAL	8 650 AUG 19		4 JAN 12		136 000 AUG 19		887 000	3 610	10 600	20.7
1977	CCCCCCCCCCCC	MANUAL	10 200 SEP 23		6 FEB 4		64 600 SEP 23		586 000	2 370	9 840	21.6
1978	CCCCCCCCCCCC	MANUAL	6 840 SEP 11		10 DEC 21		86 900 APR 2		1 640 000	6 680	9 580	20.4
1979	CCCCCCCCCC--	MANUAL	2 510 AUG 8		10 JAN 1		10 300 AUG 6		305 000	1 240	8 940	21.4
1980	--CCCCCCCC--	MANUAL	7 310 AUG 10		14 MAR 1		99 600 APR 16		1 850 000	7 560	8 840	20.0
1981	--PCCCCCCC--	MANUAL	9 280 MAY 22		20 NOV 30		126 000 AUG 4		1 710 000	---	---	---
1982	---CCCCCCCP-	MANUAL	5 830 SEP 27		56 SEP 10		83 600 JUL 8		1 750 000	---	---	---
1983	--PCCCCCCC--	MANUAL	4 360 JUL 5		16 OCT 31		42 300 JUL 12		509 000	---	---	---
1984	--PCCCCCCC--	MANUAL	5 910 SEP 14		11 OCT 31		18 100 SEP 15		368 000	---	---	---
1985	---PPPPPPP--	MANUAL	2 950 SEP 18		52 JUL 15		--- ---		---	---	---	---
1986	--PPPPPPPPP-	MANUAL	2 440 JUL 22		83 APR 15		--- ---		---	---	---	---
1987	---P-PPPP-P-	MANUAL	3 360 SEP 8		13 NOV 2		--- ---		---	---	---	---
1988	----PPPP--P-	MANUAL	251 AUG 30		46 MAY 3		--- ---		---	---	---	---
1989	---PPPPPPP--	MANUAL	2 460 APR 19		36 OCT 30		--- ---		---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

REDWATER RIVER NEAR REDWATER - STATION NO. 05EC003

LOCATION: LAT 53 56 55 N LONG 113 03 30 W
DRAINAGE AREA: 1 490 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	-------PP---	MANUAL	12 AUG 15		11 SEP 19		--- ---		---	---	---	---
1976	---PPP------	MANUAL	44 APR 14	*	4 JUN 14	*	--- ---		---	---	---	---
1977	---P--------	MANUAL	42 APR 11		32 APR 8		--- ---		---	---	---	---
1978	-----P------	MANUAL	7 JUN 20		7 JUN 20		--- ---		---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

REVILLON COUPE BELOW RIVIERE DES ROCHERS - STATION NO. 07NA004

LOCATION: LAT 58 51 10 N LONG 111 16 10 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	-----PPPPP--	MANUAL	2 900 JUN 25	*	84 AUG 26		--- ---		---	---	---	---
1972	-----PPP-----	MANUAL	708 JUL 21		30 AUG 21		--- ---		---	---	---	---
1973	----PPPPPP--	MANUAL	655 SEP 11		27 OCT 15	*	--- ---		---	---	---	---
1975	-----PPP--P--	MANUAL	214 OCT 22		95 JUN 4		--- ---		---	---	---	---
1976	----PPPPPP---	MANUAL	1 290 JUL 6		37 JUN 24		--- ---		---	---	---	---
1977	-----PPPPP--	MANUAL	978 JUN 16		40 JUL 27		--- ---		---	---	---	---
1978	-----PPPPP--	MANUAL	133 JUN 28		79 AUG 23		--- ---		---	---	---	---
1979	------PPPP--	MANUAL	343 JUL 18		57 AUG 29		--- ---		---	---	---	---
1980	-----PPPPP--	MANUAL	392 JUL 9		40 JUN 11		--- ---		---	---	---	---
1981	-----PPPPP--	MANUAL	110 JUL 9		31 AUG 5		--- ---		---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

RIBSTONE CREEK NEAR CZAR - STATION NO. 05FD005

LOCATION: LAT 52 29 17 N LONG 110 44 15 W
DRAINAGE AREA: 1 830 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	32 MAY 12 *	14 MAY 12 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

RIVIERE DES ROCHERS AT BEN HOULE'S CABIN - STATION NO. 07NA002

LOCATION: LAT 58 49 10 N LONG 111 16 30 W
DRAINAGE AREA:
TYPE OF FLOW: REGULATED SINCE 1967
TYPE OF GAUGE: MANUAL

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----PPPP---	MANUAL	2 770 SEP 8 *	87 JUN 4	--- ---	---	---	---	---
1972	-----PPP----	MANUAL	393 JUL 14	41 AUG 21	--- ---	---	---	---	---
1973	----PPPPPP--	MANUAL	387 JUN 27	28 OCT 15	--- ---	---	---	---	---
1974	-------PPPP-	MANUAL	129 OCT 7	40 AUG 26	--- ---	---	---	---	---
1975	----PPPPPP--	MANUAL	205 SEP 9	40 AUG 15	--- ---	---	---	---	---
1976	----PPPPPP--	MANUAL	205 JUL 6	37 JUN 22	--- ---	---	---	---	---
1977	----PPPPPP--	MANUAL	151 MAY 17	23 SEP 8 *	--- ---	---	---	---	---
1978	-----PPPPP--	MANUAL	175 OCT 4	28 AUG 23	--- ---	---	---	---	---
1979	-----P-PPP--	MANUAL	91 JUN 20	48 AUG 29	--- ---	---	---	---	---
1980	-----PPPPP--	MANUAL	163 JUL 9	56 JUN 11	--- ---	---	---	---	---
1981	-----PPP----	MANUAL	134 JUL 9	33 AUG 5	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ROCKY CREEK NEAR VALLEYVIEW - STATION NO. 07GF006

LOCATION: LAT 54 56 05 N LONG 117 46 35 W
DRAINAGE AREA: 18.6 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1968	CCCCCCCCCC--	MANUAL	36 JUN 14	0 JAN 1 *	1.1JUN 14	5.10	0.039	0.039	---
1969	--CCCCCCCC--	MANUAL	34 AUG 15	0 MAR 1	0.4APR 30	5.30	0.039	0.03	0.4
1970	--CCCCCCCC--	MANUAL	55 APR 21	0 MAR 1	2.1APR 21	13.1	0.131	0.06	44.1
1971	--CCCCCCCC--	MANUAL	52 APR 24	0 MAR 1	4.0JUL 12	21.0	0.156	0.09	33.6
1972	--CCCCCCCC--	MANUAL	51 JUN 26	0 MAR 1	3.5APR 28	27.4	0.127	0.09	25.2
1973	--CCCCCCCCP-	MANUAL	61 JUN 11	0 MAR 1	4.2JUN 11	24.8	0.114	0.10	20.2
1974	--CCCCCCCC--	MANUAL	116 APR 19	0 MAR 1	8.5APR 19	44.*	0.378	0.14	30.8
1975	----PPP-----	MANUAL	17 MAY 29	8 JUL 9	--- ---	---	---	---	---
1978	---P---PPP--	MANUAL	454 APR 27 *	3 OCT 17	--- ---	---	---	---	---
1979	----PPPP----	MANUAL	144 MAY 16	14 JUN 6	--- ---	---	---	---	---
1980	--------PPP-	MANUAL	9 SEP 16	3 NOV 5	--- ---	---	---	---	---
1981	--PPPPPPPPP-	MANUAL	79 NOV 9	7 APR 15	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ROSEBUD RIVER BELOW CARSTAIRS CREEK - STATION NO. 05CE006

LOCATION: LAT 51 25 00 N LONG 113 43 35 W
DRAINAGE AREA: 753 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	135 MAY 10 *	135 MAY 10 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

ROSS CREEK NEAR IRVINE - STATION NO. 05AH003

LOCATION: LAT 49 50 27 N LONG 110 22 00 W
DRAINAGE AREA: 647 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	140 MAY 4 *	140 MAY 4 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

SAGE CREEK AT Q RANCH NEAR WILDHORSE - STATION NO. 11AA026

LOCATION: LAT 49 06 29 N LONG 110 13 23 W
DRAINAGE AREA: 456 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	32 MAY 9 *	32 MAY 9 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

SAKWATAMAU RIVER NEAR WHITECOURT - STATION NO. 07AH003

LOCATION: LAT 54 12 05 N LONG 115 46 40 W
DRAINAGE AREA: 1 140 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1979	----P-------	MANUAL	408 MAY 2 *	85 MAY 28 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

SAND RIVER NEAR THE MOUTH - STATION NO. 06AB001

LOCATION: LAT 54 28 16 N LONG 111 11 08 W
DRAINAGE AREA: 4 910 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1984	---PPP-P----	MANUAL	180 JUN 7 *	8 AUG 30	---	---	---	---	---	---
1985	---PP-P--P--	MANUAL	60 APR 23	6 OCT 1	---	---	---	---	---	---
1986	-----P-P----	MANUAL	62 AUG 6	18 JUN 2	---	---	---	---	---	---
1987	----PP-P----	MANUAL	48 JUN 4	10 AUG 18	---	---	---	---	---	---
1988	----PPP-----	MANUAL	85 JUL 11	7 MAY 18	---	---	---	---	---	---
1989	----PPPP-PP-	MANUAL	50 MAY 31	5 AUG 30 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SAWRIDGE CREEK NEAR SLAVE LAKE - STATION NO. 07BK009

LOCATION: LAT 55 16 18 N LONG 114 46 26 W
DRAINAGE AREA: 233 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1978	---------P--	MANUAL	38 OCT 11 *	38 OCT 11 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SEVEN PERSONS CREEK AT MEDICINE HAT - STATION NO. 05AH005

LOCATION: LAT 50 01 25 N LONG 110 41 02 W
DRAINAGE AREA: 3 270 km²
TYPE OF FLOW: REGULATED SINCE 1955
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1979	------P-----	MANUAL	30 JUL 31 *	30 JUL 31 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SHEEP RIVER AT BLACK DIAMOND - STATION NO. 05BL014

LOCATION: LAT 50 41 14 N LONG 114 14 34 W
DRAINAGE AREA: 595 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	------PP-PP-	MANUAL	4	JUL 29	1	OCT 1	---	---	---	---	---	---
1975	---P-PPPPP--	MANUAL	150	JUN 26	1	SEP 29	---	---	---	---	---	---
1976	---PPPPPP---	MANUAL	2 730	AUG 5 *	0	SEP 24 *	---	---	---	---	---	---
1977	---PPPPPP---	MANUAL	80	SEP 26	1	JUL 25	---	---	---	---	---	---
1978	----PP-PP---	MANUAL	727	JUN 5	3	SEP 25	---	---	---	---	---	---
1979	---PPPPPP---	MANUAL	21	MAY 31	0	AUG 20	---	---	---	---	---	---
1980	---PP-PP-P--	MANUAL	1 340	MAY 26	1	OCT 8	---	---	---	---	---	---
1981	--PPPPPPP---	MANUAL	1 410	MAY 26	6	SEP 28	---	---	---	---	---	---
1982	---PPPPPP---	MANUAL	137	MAY 26	2	AUG 23	---	---	---	---	---	---
1983	----PPPPP---	MANUAL	129	MAY 30	1	AUG 31	---	---	---	---	---	---
1984	----PP-PP---	MANUAL	91	JUN 9	3	SEP 5	---	---	---	---	---	---
1985	----PPPPP---	MANUAL	1 620	SEP 13	11	JUL 17	---	---	---	---	---	---
1986	--PPPPPPP---	MANUAL	395	MAY 22	2	AUG 27	---	---	---	---	---	---
1987	----PPPP-PP-	MANUAL	167	JUL 21	2	OCT 5	---	---	---	---	---	---
1988	----PPPPP--	MANUAL	16	MAY 25	3	JUL 28	---	---	---	---	---	---
1989	----PPPPP---	MANUAL	46	JUN 13	3	SEP 26	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SHEEP RIVER AT OKOTOKS - STATION NO. 05BL012

LOCATION: LAT 50 43 17 N LONG 113 58 51 W
DRAINAGE AREA: 1 500 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	----P-------	MANUAL	82	MAY 14 *	82	MAY 14 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SIFFLEUR RIVER NEAR THE MOUTH - STATION NO. 05DA002

LOCATION: LAT 52 02 39 N LONG 116 23 02 W
DRAINAGE AREA: 515 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUN 20	11:10	5.0	44.2	10.0	DH59	92	107														
JUN 20	11:11	5.0	44.2	10.0	DH59	89	114														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

SIFFLEUR RIVER NEAR THE MOUTH - STATION NO. 05DA002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1975	---PP-PP-P--	MANUAL	32	JUL 10	0	AUG 27 *	---	---	---	---	---	---
1976	----PPPPPP--	MANUAL	17	JUL 20	1	OCT 26	---	---	---	---	---	---
1977	----PPPPP-P-	MANUAL	11	JUL 27	0	MAY 31	---	---	---	---	---	---
1978	---PPP-PP---	MANUAL	11	JUN 23	0	APR 24	---	---	---	---	---	---
1979	----PPPPPPP-	MANUAL	29	MAY 24	0	JUN 27	---	---	---	---	---	---
1980	---PPP-PP---	MANUAL	43	JUN 24	4	APR 22	---	---	---	---	---	---
1981	----PPPPPP--	MANUAL	64	JUL 29	2	OCT 20	---	---	---	---	---	---
1982	---PPPPPP--	MANUAL	11	JUL 8	2	APR 28	---	---	---	---	---	---
1983	----PPPPPP--	MANUAL	18	JUN 2	1	SEP 19	---	---	---	---	---	---
1984	---PPPPPP---	MANUAL	23	MAY 31	1	SEP 25	---	---	---	---	---	---
1985	----PP-P-----	MANUAL	7	AUG 1	2	JUN 26	---	---	---	---	---	---
1986	----PP------	MANUAL	368	MAY 29 *	49	JUN 19	---	---	---	---	---	---
1990	-----P------	MANUAL	92	JUN 28	89	JUN 28	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SIMONETTE RIVER NEAR GOODWIN - STATION NO. 07GF001

LOCATION: LAT 55 08 30 N LONG 118 10 30 W
DRAINAGE AREA: 5 050 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
JUN 13	12:45	12.0	845	V	66.0	X	DIP	8492	240														
JUN 13	12:46	12.0	845	V	66.0	X	DIP	9063	207														

NOTE: SINGLE VERTICAL IS LOCATED AT 66.0 METRES FOR 1990

DISCHARGE SYMBOL(S): V - DAILY MEAN; MANUAL GAUGE
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SIMONETTE RIVER NEAR GOODWIN - STATION NO. 07GF001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	---------P-P-	MANUAL	17	NOV 7	11	SEP 19	---	---	---	---	---	---
1975	---PPPPPPP--	MANUAL	972	APR 29	4	AUG 19	---	---	---	---	---	---
1976	---PPPP------	MANUAL	4 300	APR 8	24	JUL 28	---	---	---	---	---	---
1977	---PPPP-PP---	MANUAL	2 690	APR 11	19	OCT 26	---	---	---	---	---	---
1978	----PPPPPP---	MANUAL	1 200	MAY 2	6	AUG 30	---	---	---	---	---	---
1979	---PPPPPP---	MANUAL	3 790	JUN 16	6	OCT 30	---	---	---	---	---	---
1980	---P-PPPP----	MANUAL	3 480	JUN 7	40	JUL 24	---	---	---	---	---	---
1981	----P---P-PP---	MANUAL	467	APR 28	3	SEP 4 *	---	---	---	---	---	---
1982	-----P-PP-P----	MANUAL	2 880	JUL 15	42	OCT 5	---	---	---	---	---	---
1983	----PPPPPP----	MANUAL	7 230	JUL 16	37	AUG 30	---	---	---	---	---	---
1984	----P-PPPP----	MANUAL	738	APR 17	9	AUG 28	---	---	---	---	---	---
1985	---PPPPPPP--	MANUAL	909	APR 18	3	JUL 23	---	---	---	---	---	---
1986	---PPPPPPP--	MANUAL	830	MAY 22	7	SEP 24	---	---	---	---	---	---
1987	---P-P-PPP---	MANUAL	3 110	AUG 6	24	OCT 28	---	---	---	---	---	---
1988	---PPP-PP-P--	MANUAL	6 230	JUN 13	11	AUG 22	---	---	---	---	---	---
1989	---PPPPP-P--	MANUAL	5 110	MAY 22	46	SEP 26	---	---	---	---	---	---
1990	-----P------	MANUAL	9 060	JUN 13 *	8 490	JUN 13	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 59 52 20 N LONG 111 35 00 W
DRAINAGE AREA: 606 000 km²
TYPE OF FLOW: REGULATED SINCE 1968
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 53 200 000 TONNES FOR THE PERIOD MAY 18 TO OCT 15

DAY	MAY DAILY DISCHARGE (m³/s)		MAY MEAN CONCENTRATION (mg/L)		MAY DAILY LOAD (t)	JUN DAILY DISCHARGE (m³/s)		JUN MEAN CONCENTRATION (mg/L)		JUN DAILY LOAD (t)	JUL DAILY DISCHARGE (m³/s)	JUL MEAN CONCENTRATION (mg/L)		JUL DAILY LOAD (t)	DAY
1	3 600	B				5 280	E	272	S	124 000	5 860	761	S	385 000	1
2	3 660	B				5 280	E	313	S	143 000	5 770	687	S	342 000	2
3	3 860	B				5 310	E	372	S	171 000	5 690	695	S	342 000	3
4	4 420	B				5 400	E	444	S	207 000	5 610	652	S	316 000	4
5	4 900	B				5 600	E	581	S	281 000	5 530	930	S	444 000	5
6	5 400	B				6 000	E	858		445 000	5 430	578	S	271 000	6
7	5 200	B				6 380	E	1 060		584 000	5 370	503	S	233 000	7
8	4 840	A				6 500	E	1 360	S	764 000	5 290	400	S	183 000	8
9	4 670					6 400	E	1 330	S	735 000	5 180	344	S	154 000	9
10	4 680					6 240	E	1 390	S	749 000	5 190	345	S	155 000	10
11	4 700					6 180	E	1 430	S	764 000	5 270	386	S	176 000	11
12	4 770					6 020	E	1 440	S	749 000	5 350	357	S	165 000	12
13	4 860					5 980	E	1 550	S	801 000	5 460	345	S	163 000	13
14	4 980					5 920	A	1 730	S	885 000	5 200	362	S	163 000	14
15	5 100					5 860		1 530	S	775 000	5 200	449	S	202 000	15
16	5 200					6 740		1 100	S	641 000	5 190	853	S	382 000	16
17	5 180					8 220		1 640	S	1 160 000	5 110	900	S	397 000	17
18	5 080		573	S	251 000	8 830		3 640	S	2 780 000	5 010	565	S	245 000	18
19	5 040		550	S	240 000	8 620		8 950	S	6 670 000	5 030	532	S	231 000	19
20	4 950		510	S	218 000	7 960		8 760	S	6 020 000	5 080	408	S	178 000	20
21	4 940		450	S	192 000	7 410		6 210	S	3 980 000	5 050	348	S	152 000	21
22	4 990		412	S	178 000	7 150		4 850	S	3 000 000	4 990	343	S	148 000	22
23	4 990		309	S	133 000	6 960		4 050		2 440 000	4 840	299	S	125 000	23
24	5 010		280	S	121 000	6 760		2 980	S	1 740 000	4 700	311	S	126 000	24
25	5 040		253	S	110 000	6 600		2 350	S	1 340 000	4 550	305	S	120 000	25
26	5 110		238	S	105 000	6 450		1 780	S	992 000	4 470	262	S	101 000	26
27	5 170		249	S	111 000	6 310		1 670	S	910 000	4 400	299	S	114 000	27
28	5 300		276	S	126 000	6 170		1 160	S	618 000	4 340	316	S	118 000	28
29	5 300		299	S	137 000	6 030		997		519 000	4 300	278	S	103 000	29
30	5 310		307	S	141 000	5 950		888	S	457 000	4 210	269	S	97 900	30
31	5 290	A	259	S	118 000						4 160	276	S	99 200	31
TOTAL	151 540				2 181 000	194 510				41 444 000	156 830			6 431 100	

DAY	AUG DAILY DISCHARGE (m³/s)	AUG MEAN CONCENTRATION (mg/L)	AUG DAILY LOAD (t)	SEP DAILY DISCHARGE (m³/s)	SEP MEAN CONCENTRATION (mg/L)	SEP DAILY LOAD (t)	OCT DAILY DISCHARGE (m³/s)	OCT MEAN CONCENTRATION (mg/L)	OCT DAILY LOAD (t)	DAY
1	4 140	253 S	90 500	3 410	129	38 000	3 270	293 S	85 300	1
2	3 920	348 S	118 000	3 340	154 S	44 400	3 430	418 S	124 000	2
3	3 950	189 S	64 500	3 250	126	35 400	3 490	186 S	56 100	3
4	4 100	198 S	70 100	3 160	95 S	25 900	3 480	116 S	34 900	4
5	4 140	235 S	84 100	3 100	80 S	21 400	3 430	124 S	36 700	5
6	4 120	205 S	73 000	3 170	77 S	21 100	3 400	155 S	45 500	6
7	3 970	151 S	51 800	3 210	84 S	23 300	3 380	122 S	35 600	7
8	3 710	170 S	54 500	3 300	96 S	27 400	3 360	103 S	29 900	8
9	3 850	171 S	56 900	3 390	96 S	28 100	3 270	65 S	18 400	9
10	3 850	248 S	82 500	3 390	107 S	31 300	3 250	66 S	18 500	10
11	3 800	261 S	85 700	3 430	135 S	40 000	3 380	74 S	21 600	11
12	3 680	149 S	47 400	3 450	124 S	37 000	3 450	97	28 900	12
13	3 560	140 S	43 100	3 460	85 S	25 400	3 540	102	31 200	13
14	3 490	140 S	42 200	3 400	82 S	24 100	3 500	93	28 100	14
15	3 430	112 S	33 200	3 420	91 S	26 900	3 410	92 S	27 100	15
16	3 490	108 S	32 600	3 390	95 S	27 800	3 420			16
17	3 630	103 S	32 300	3 350	89 S	25 800	3 420			17
18	3 720	112 S	36 000	3 250	105 S	29 500	3 410			18
19	3 670	163 S	51 700	3 310	87 S	24 900	3 390			19
20	3 670	127 S	40 300	3 500	76 S	23 000	3 330			20
21	3 590	107 S	33 200	3 560	126 S	38 800	3 300			21
22	3 620	103 S	32 200	3 590	135 S	41 900	3 310			22
23	3 620	110	34 400	3 620	92 S	28 800	3 310			23
24	3 530	120 S	36 600	3 650	95 S	30 000	3 240			24
25	3 490	144	43 400	3 580	153 S	47 300	3 150			25
26	3 580	154 S	47 600	3 530	155 S	47 300	3 130			26
27	3 530	122 S	37 200	3 510	80 S	24 100	3 080	B		27
28	3 450	119 S	35 500	3 530	89 S	27 100	3 020	B		28
29	3 360	77 S	22 400	3 380	106 S	31 000	2 850	B		29
30	3 330	75 S	21 600	3 300	111 S	31 600	2 730	B		30
31	3 380	84 S	24 500				2 690	B		31
TOTAL	114 370		1 559 000	101 930		928 800	101 920		621 800	

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)		DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLA
MAY 18	11:45	10.0	5100		WELB		PUMP	573		164	37	50	70	81	91	94	97	100			6	44	5
MAY 19	10:30	11.0	5060		WELB		PUMP	564															
MAY 19	14:00	11.0	5050		WELB		PUMP	558															
MAY 20	09:00	11.0	5000		WELB		PUMP	533															
MAY 20	12:00	11.0	4980		WELB		PUMP	522															
MAY 21	09:00	11.0	4900		WELB		PUMP	485															
MAY 21	14:00	11.0	4900		WELB		PUMP	454															
MAY 22	08:00	11.0	4990		WELB		PUMP	429	C														
MAY 22	13:20	11.0	5000		WELB		PUMP	429															
MAY 23	08:20	12.0	4980		WELB		PUMP	370															
MAY 23	12:00	12.0	4990		WELB		PUMP	314															
MAY 24	08:00		5010		WELB		PUMP	316	C														
MAY 24	13:15	15.0	5000		WELB		PUMP	284															
MAY 25	15:00	15.0	5030		WELB		PUMP	256	C														
MAY 26	08:00	15.0	5080		WELB		PUMP	251	C														
MAY 26	08:30	15.0	5090		WELB		PUMP	245	C														
MAY 26	12:30	15.0	5110		WELB		PUMP	247	C														
MAY 27	09:00	15.0	5140		WELB		PUMP	214															
MAY 27	12:00	15.0	5150		WELB		PUMP	242	C														
MAY 28	09:00	15.0	5240		WELB		PUMP	268															
MAY 28	12:00	15.0	5260		WELB		PUMP	271															
MAY 29	08:00	15.0	5320		WELB		PUMP	271	C														
MAY 29	14:00	15.0	5310		WELB		PUMP	272															
MAY 30	08:30	16.0	5300		WELB		PUMP	359	C														
MAY 30	17:00	15.0	5310		WELB		PUMP	292	C														
MAY 31	10:30	16.0	5290	V	WELB		PUMP	281															
JUN 01	08:00	16.0	5280	Y	WELB		PUMP	258															
JUN 01	12:00	16.0	5280	Y	WELB		PUMP	263															
JUN 01	14:45	16.0	5280	Y	WELB		PUMP	256		149	27	41	59	71	85	91	95	99	100		9	50	4
JUN 02	09:30	11.0	5280	Y	WELB		PUMP	294															
JUN 02	15:30	12.0	5280	Y	WELB		PUMP	305															
JUN 03	09:00	16.0	5310	Y	WELB		PUMP	345	C														
JUN 03	12:00	16.0	5310	Y	WELB		PUMP	344															
JUN 04	09:00	16.0	5400	Y	WELB		PUMP	442	C														
JUN 04	14:00	16.0	5400	Y	WELB		PUMP	437	C														
JUN 05	10:00	16.0	5600	Y	WELB		PUMP	478	C														
JUN 08	13:45	15.0	6500	Y	WELB		PUMP	1146		160	32	42	61	72	87	93	96	99	100		7	51	4
JUN 09	09:00	16.0	6400	Y	WELB		PUMP	1349															
JUN 10	09:00	16.0	6240	Y	WELB		PUMP	1210															
JUN 10	12:00	16.0	6240	Y	WELB		PUMP	1145															
JUN 11	09:00	16.0	6180	Y	WELB		PUMP	1337															
JUN 11	14:00	16.0	6180	Y	WELB		PUMP	1390															
JUN 12	08:30	16.0	6020	Y	WELB		PUMP	1431															
JUN 12	12:00	16.0	6020	Y	WELB		PUMP	1344															
JUN 13	09:00	16.0	5980	Y	WELB		PUMP	1565															
JUN 13	13:20	16.0	5980	Y	WELB		PUMP	1525	C														
JUN 14	09:00	15.0	5920	V	WELB		PUMP	1688	C														
JUN 15	19:30	16.0	5860		WELB		PUMP	1521	C														
JUN 16	07:30	16.0	5930		WELB		PUMP	1024	C														
JUN 16	10:45	16.0	6120		WELB		PUMP	1085															
JUN 16	17:30	16.0	6750		WELB		PUMP	1056															
JUN 17	09:00	16.0	7740		WELB		PUMP	1282															
JUN 17	11:00	16.0	7850		WELB		PUMP	1256															
JUN 17	12:00	16.0	7930		WELB		PUMP	1317															
JUN 17	17:00	16.0	8030		WELB		PUMP	1388															
JUN 18	08:00	17.0	8780		WELB		PUMP	5210		154	26	29	46	60	82	91	95	99	100		9	62	29
JUN 18	12:00	16.0	8850		WELB		PUMP	5593		162	21	29	52	65	80	88	92	98	100		12	59	29
JUN 19	07:30	17.0	8810		WELB		PUMP	6123		219													
JUN 19	10:00	16.0	8770		WELB		PUMP	6952		262													
JUN 19	13:00	17.0	8750		WELB		PUMP	7931		447													
JUN 19	15:00	16.0	8700		WELB		PUMP	8537		250													
JUN 20	08:00	16.0	8260		WELB		PUMP	10019		231	38	59	74	86	96	97	98	99	100		3	38	59
JUN 20	09:37	14.5	8210		WELB		PUMP	9621		235	13	44	76	89	98	99	100				1	55	44
JUN 20	12:00	16.0	8130		WELB		PUMP	9519		269	29	52	72	80	91	92	93	96	100		8	40	52
JUN 20	14:00	16.0	8070		WELB		PUMP	9710		249	49	56	70	89	96	98	98	99	100		2	42	56
JUN 20	14:34	14.5	1870		130	M	P61	9087		252	48	64	82	93	100						0	36	64
JUN 20	14:38	14.5	1870		130	M	P61	9272		248	39	60	81	88	99	99	99	100			1	39	60
JUN 20	14:39	14.5	1870		130	M	DIP	5661		230	54	76	91	98	98	98	99	99	100		2	22	76
JUN 20	14:44	14.5	1690		210	M	P61	8943		248	46	61	79	90	97	99	99	100			1	38	61
JUN 20	14:46	14.5	1690		210	M	P61	9684		253	35	60	76	88	98	99	99	99	100		1	39	60
JUN 20	14:51	14.5	1690		210	M	P61	9337		246	36	57	74	85	96	97	97	99	100		3	40	57
JUN 20	14:52	14.5	1690		210	M	DIP	6264		245	53	74	88	97	99	99	99	100			1	25	74
JUN 20	15:05	14.5	1740		290	M	P61	9068		261	53	57	87	91	97	98	98	99	100		2	41	57
JUN 20	15:07	14.5	1740		290	M	P61	9538		254	46	59	78	79	99	99	100				1	40	59
JUN 20	15:08	14.5	1740		290	M	DIP	4761		237	60	82	95	98	99	99	100				1	17	82
JUN 20	15:14	14.5	1740		290	M	P61	9507		250	39	59	76	87	98	98	99	100			2	39	59
JUN 20	15:18	14.5	1630		380	M	P61	0															
JUN 20	15:20	14.5	1630		380	M	P61	9586		246	43	57	77	88	97	99	100				1	42	57
JUN 20	15:25	14.5	1630		380	M	P61	9729		267	33	59	69	84	96	98	99	100			2	39	59
JUN 20	15:26	14.5	1630		380	M	DIP	5359		235	51	77	93	94	100						0	23	77
JUN 20	15:35	14.5	1110		530	M	P61	9412		245	38	59	75	88	97	99	99	100			1	40	59
JUN 20	15:38	14.5	1110		530	M	P61	9393		255	45	58	78	88	98	99	99	100			1	40	58
JUN 20	15:45	14.5	1110		530	M	DIP	6483		248	48	71	83	97	99	99	99	100			1	28	71
JUN 20	17:45	14.5	7950		WELB		PUMP	8736		237	32	56	82	86	91	100					0	44	56
JUN 21	09:00	16.0	7550		WELB		PUMP	7007		233													
JUN 21	10:00	16.0	7530		WELB		PUMP	6934		217													
JUN 21	12:00	16.0	7490		WELB		PUMP	6543		229													
JUN 21	15:00	16.0	7440		WELB		PUMP	6350		222													
JUN 22	08:17		7250		WELB		PUMP	5194		214	28	59	75	89	97	99	100				1	40	59
JUN 22	09:00	16.0	7230		WELB		PUMP	5428		210	46	59	77	87	95	97	98	100			3	38	59
JUN 22	12:00	17.0	7200		WELB		PUMP	5141		260	27	53	73	87	93	96	97	98	100		4	43	53
JUN 22	12:01	14.0	1110		100	M	DIP	4756		186	48	67	83	94	98	99	100				1	32	67
JUN 22	12:02	14.0	1110		100	M	P61	5280		223	43	63	79	91	96	98	99	100			2	35	63
JUN 22	12:05	14.0	1110		100	M	P61	4868		217	43	62	80	91	97	98	99	100			2	36	62
JUN 22	12:10	14.0	1650		190	M	P61	4975		196	47	62	81	92	98	99	100				1	37	62
JUN 22	12:11	14.0	1650		190	M	P61	5299		205	43	63	78	88	92	93	94	96	100		7	30	63
JUN 22	12:16	14.0	1650		190	M	P61	5215		202	47	61	80	91	97	97	99	99	100		3	36	61
JUN 22	12:18	14.0	1650		190	M	DIP	4827		205	56	62	66	97	98	99	99	100			1	37	62
JUN 22	12:20	14.0	1580		270	M	DIP	4107		201	49	72	86	97	99	99	99	100			1	27	72
JUN 22	12:21	14.0	1580		270	M	P61	5285		211	49	58	75	90	96	98	99	100			2	40	58
JUN 22	12:22	14.0	1580		270	M	P61	5124		198	37	60	72	85	95	98	99	100			2	38	60
JUN 22	12:25	14.0	1580		270	M	P61	5080		199	43	60	73	84	95	98	99	100			2	38	60
JUN 22	12:30	14.0	1890		350	M	DIP	4124		207	52	71	86	97	98	99	99	100			1	28	71
JUN 22	12:31	14.0	1890		350	M	P61	5109		205	45	65	80	90	99	99	100				1	34	65
JUN 22	12:33	14.0	1890		350	M	P61	5212		206	39	61	76	88	96	98	99	100			2	37	61
JUN 22	12:37	14.0	1120		530	M	DIP	4701		212	46	65	82	92	98	99	99	99	100		2	33	65
JUN 22	12:39	14.0	1120		530	M	P61	5078		201	44	60	77	87	95	97	99	100			3	37	60
JUN 22	12:40	14.0	1120		530	M	P61	5611		207	44	63	78	91	95	99	99	100			1	36	63
JUN 23	14:21	15.0	7180		WELB		PUMP	4969		217	25	60	77	90	98	99	99	100			1	39	60

CONTINUED

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 22	20:00	17.0	7120		WELB	PUMP	4779	229	46	60	77	87	95	97	98	99	100			3	37	60
JUN 24	09:00	16.0	6850		WELB	PUMP	3595	241	35	45	90	91	95	96	96	97	100			4	51	45
JUN 24	14:00	16.0	6790		WELB	PUMP	2697															
JUN 25	11:00		6640		WELB	PUMP	2532															
JUN 25	18:30	19.0	6610		WELB	PUMP	2329															
JUN 26	09:30		6500		WELB	PUMP	1830															
JUN 26	10:00	16.0	6490		WELB	PUMP	1860															
JUN 26	14:30	17.0	6460		WELB	PUMP	1837															
JUN 26	19:00	16.0	6440		WELB	PUMP	1786															
JUN 27	08:00	19.0	6390		WELB	PUMP	1603															
JUN 27	12:00	16.0	6350		WELB	PUMP	1607															
JUN 27	14:00	19.0	6340		WELB	PUMP	1720	189	39	56	72	83	92	97	99	100				3	41	56
JUN 28	10:00	20.0	6220		WELB	PUMP	1520															
JUN 28	12:00	20.0	6210		WELB	PUMP	1291															
JUN 28	13:00	20.0	6200		WELB	PUMP	1204															
JUN 28	15:00	20.0	6190		WELB	PUMP	1132															
JUN 30	12:30	20.0	5970		WELB	PUMP	968															
JUN 30	15:00	20.0	5960		WELB	PUMP	891															
JUL 01	09:30	20.0	5890		WELB	PUMP	810															
JUL 01	15:30	20.0	5860		WELB	PUMP	755															
JUL 02	10:30	19.0	5800		WELB	PUMP	734															
JUL 02	15:30	19.0	5770		WELB	PUMP	672															
JUL 03	08:30	20.0	5720		WELB	PUMP	704															
JUL 03	14:00	20.0	5700		WELB	PUMP	655															
JUL 04	10:00	20.0	5640		WELB	PUMP	686															
JUL 04	16:00	19.0	5620		WELB	PUMP	625															
JUL 05	08:45	20.0	5560		WELB	PUMP	776															
JUL 05	14:00	20.0	5550		WELB	PUMP	1016															
JUL 06	09:00	20.0	5460		WELB	PUMP	614															
JUL 06	13:00	20.0	5450		WELB	PUMP	597															
JUL 07	08:30	19.0	5400		WELB	PUMP	513															
JUL 07	12:00	19.0	5380		WELB	PUMP	453															
JUL 08	08:30	19.0	5330		WELB	PUMP	428															
JUL 08	12:00	19.0	5310		WELB	PUMP	406															
JUL 09	08:30	19.0	5210		WELB	PUMP	383															
JUL 09	12:00	19.0	5190		WELB	PUMP	352															
JUL 10	08:30	19.0	5160		WELB	PUMP	339															
JUL 10	09:49	20.0	5160		WELB	PUMP	315	153	30	39	61	76	88	96	98	100				4	57	39
JUL 10	12:00	20.0	5170		WELB	PUMP	320															
JUL 11	08:30	20.0	5200		WELB	PUMP	314															
JUL 12	08:30	20.0	5300		WELB	PUMP	402															
JUL 12	13:00	22.0	5310		WELB	PUMP	333															
JUL 13	08:30	22.0	5430		WELB	PUMP	327															
JUL 13	13:30	22.0	5440		WELB	PUMP	346															
JUL 14	09:00	21.0	5340		WELB	PUMP	322															
JUL 14	14:00	21.0	5250		WELB	PUMP	341															
JUL 15	09:00	21.0	5180		WELB	PUMP	420															
JUL 15	14:00	21.0	5190		WELB	PUMP	405															
JUL 16	09:00	22.0	5210		WELB	PUMP	517															
JUL 17	09:00	18.0	5160		WELB	PUMP	1228															
JUL 18	09:00	18.0	5050		WELB	PUMP	523															
JUL 19	09:00	19.0	5000		WELB	PUMP	557															
JUL 20	08:30	18.0	5050		WELB	PUMP	446															
JUL 21	09:00	20.0	5070		WELB	PUMP	341															
JUL 21	15:30	20.0	5060		WELB	PUMP	320															
JUL 22	09:00	20.0	5020		WELB	PUMP	336															
JUL 22	12:00	20.0	5010		WELB	PUMP	325															
JUL 23	08:30	20.0	4910		WELB	PUMP	322															
JUL 23	14:00	19.0	4860		WELB	PUMP	286															
JUL 24	07:30	20.0	4780		WELB	PUMP	277															
JUL 24	13:00	21.0	4750		WELB	PUMP	309															
JUL 25	08:30	19.0	4600		WELB	PUMP	271															
JUL 25	13:00	21.0	4570		WELB	PUMP	265															
JUL 26	08:30	20.0	4490		WELB	PUMP	300															
JUL 26	13:00	21.0	4480		WELB	PUMP	245															
JUL 27	08:30	20.0	4440		WELB	PUMP	226															
JUL 27	14:00	21.0	4420		WELB	PUMP	226															
JUL 28	10:00	20.0	4350		WELB	PUMP	430															
JUL 28	14:00	20.0	4340		WELB	PUMP	249															
JUL 29	12:00	21.0	4300		WELB	PUMP	307															
JUL 30	08:30	21.0	4280		WELB	PUMP	239															
JUL 30	13:00	21.0	4260		WELB	PUMP	216															
JUL 31	08:30	21.0	4160		WELB	PUMP	315															
AUG 01	08:30	21.0	4160		WELB	PUMP	189															
AUG 01	10:05	21.0	4160		WELB	PUMP	179	140														
AUG 01	10:07	21.0	4160		WELB	PUMP	165	143														
AUG 01	13:00	21.0	4160		WELB	PUMP	189															
AUG 02	08:30	21.0	4040		WELB	PUMP	473															
AUG 03	08:30	20.0	3860		WELB	PUMP	198															
AUG 04	13:30	21.0	4080		WELB	PUMP	169															
AUG 05	09:00		4130		WELB	PUMP	229															
AUG 06	08:20		4120		WELB	PUMP	207															
AUG 07	10:15		4100		WELB	PUMP	178															
AUG 08	08:00	19.0	3750		WELB	PUMP	168															
AUG 09	08:00	19.0	3800		WELB	PUMP	176															
AUG 10	08:00	19.0	3860		WELB	PUMP	197															
AUG 11	09:30	20.0	3820		WELB	PUMP	344															
AUG 12	08:00	19.0	3750		WELB	PUMP	152															
AUG 13	12:00	19.0	3590		WELB	PUMP	152															
AUG 14	12:00	19.0	3520		WELB	PUMP	149															
AUG 15	12:00	19.0	3460		WELB	PUMP	113															
AUG 16	09:00	18.5	3430		WELB	PUMP	109															
AUG 17	08:00	18.0	3550		WELB	PUMP	111															
AUG 18	15:00	19.0	3720		WELB	PUMP	93															
AUG 19	09:00	19.0	3690		WELB	PUMP	166															
AUG 20	08:00	18.0	3670		WELB	PUMP	142															
AUG 21	08:30	18.0	3610		WELB	PUMP	141	C														
AUG 21	09:45	19.0	3610		WELB	PUMP	95															
AUG 22	08:30	18.0	3590		WELB	PUMP	100															
AUG 24	23:59	18.0	3510		WELB	PUMP	124															
AUG 26	13:00	16.0	3550		WELB	PUMP	185	C														
AUG 27	08:00	16.0	3560		WELB	PUMP	98															
AUG 28	09:00	16.0	3490		WELB	PUMP	174															
AUG 29	08:00	16.0	3360		WELB	PUMP	75															
AUG 30	08:00	16.0	3340		WELB	PUMP	74															
AUG 31	09:00	17.0	3340		WELB	PUMP	74															
SEP 02	09:00	15.0	3390		WELB	PUMP	158															
SEP 04	09:30	15.0	3200		WELB	PUMP	118															
SEP 04	10:50	15.0	3200		WELB	PUMP	80															
SEP 05	09:00	15.0	3090		WELB	PUMP	83															
SEP 06	08:00	14.0	3140		WELB	PUMP	78															
SEP 07	08:30	14.0	3180		WELB	PUMP	77															
SEP 08	14:00	15.0	3280		WELB	PUMP	99															
SEP 09	10:00	13.0	3350		WELB	PUMP	97															
SEP 10	09:00	13.0	3400		WELB	PUMP	90															
SEP 11	09:00	13.0	3400		WELB	PUMP	121															
SEP 12	09:00	12.0	3430		WELB	PUMP	148															
SEP 13	08:30	14.0	3470		WELB	PUMP	88															
SEP 14	09:00	14.0	3400		WELB	PUMP	81															
SEP 15	14:00	14.0	3410		WELB	PUMP	88															
SEP 16	14:00	14.0	3400		WELB	PUMP	101															

CONTINUED

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 .004 .008 .016 .031 .062 .125 .250 .500 1.00 2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
SEP 17	08:30	12.5	3370	WELB	PUMP	83					
SEP 18	09:00	12.0	3300	WELB	PUMP	103					
SEP 19	09:00	12.0	3250	WELB	PUMP	108					
SEP 20	09:00	12.0	3410	WELB	PUMP	64					
SEP 21	09:00	12.0	3510	WELB	PUMP	107					
SEP 22	13:00	12.0	3600	WELB	PUMP	152					
SEP 23	08:30	12.0	3570	WELB	PUMP	94					
SEP 24	09:00	11.5	3650	WELB	PUMP	92					
SEP 25	09:00	11.5	3630	WELB	PUMP	99					
SEP 26	08:30	11.0	3550	WELB	PUMP	225 C					
SEP 27	12:09	11.0	3510	WELB	PUMP	78					
SEP 27	12:10	11.0	3510	WELB	PUMP	79					
SEP 27	14:30	10.0	3520	WELB	PUMP	77					
SEP 28	13:00	8.0	3520	WELB	PUMP	88					
SEP 29	14:30	10.0	3420	WELB	PUMP	94					
SEP 30	09:30	11.0	3390	WELB	PUMP	111					
OCT 01	12:00	10.0	3360	WELB	PUMP	63					
OCT 02	08:30	11.0	3390	WELB	PUMP	597					
OCT 03	08:30	9.0	3480	WELB	PUMP	244					
OCT 04	08:30	9.5	3500	WELB	PUMP	132					
OCT 05	08:30	9.5	3450	WELB	PUMP	104					
OCT 06	15:30	9.0	3400	WELB	PUMP	168					
OCT 07	12:30	9.0	3380	WELB	PUMP	128					
OCT 08	10:30	8.0	3370	WELB	PUMP	120					
OCT 09	08:30	7.0	3320	WELB	PUMP	70					
OCT 10	08:30	8.0	3240	WELB	PUMP	69					
OCT 11	08:30	6.0	3290	WELB	PUMP	63					
OCT 15	12:40		3420	WELB	DIP	92					

NOTE: SINGLE VERTICAL LOCATED AT WELB (WATER'S EDGE LEFT BANK) FOR 1990

DISCHARGE SYMBOL(S): V - DAILY MEAN; MANUAL GAUGE Y - DAILY MEAN; ESTIMATED
CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): M - A SEDIMENT MEASUREMENT VERTICAL

SLAVE RIVER AT FITZGERALD - STATION NO. 07NB001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1971	-----P-CCC--	MANUAL	1 360 JUN 22	84 SEP 1	162 000 AUG 1	5 260 000	---	---	---
1972	-----CCCC---	MANUAL	7 610 JUN 22	130 SEP 29	4 640 000 JUN 22	44 500 000	---	---	---
1973	----PCCCCP--	MANUAL	1 010 JUN 24	45 SEP 12	558 000 JUN 24	20 700 000	---	---	---
1974	-----CCCCC--	MANUAL	885 JUL 25	85 SEP 25	544 000 JUL 25	21 300 000	---	---	---
1975	----PCCCCC--	MANUAL	558 MAY 16	35 OCT 31	238 000 MAY 16	12 300 000	---	---	---
1976	----CCCCP---	MANUAL	3 060 JUL 8	54 AUG 5	1 640 000 JUL 8	25 300 000	---	---	---
1977	----CCCCCP--	MANUAL	720 MAY 20	28 SEP 27	384 000 MAY 19	14 600 000	---	---	---
1978	----CCCCC---	MANUAL	1 540 JUN 15	52 SEP 6	757 000 JUN 15	19 900 000	---	---	---
1979	----PCCCCC--		1 210 JUN 9	45 OCT 23	691 000 JUN 9	23 100 000	---	---	---
1980	----CCCCCC--	AUTO	2 030 JUN 17	48 SEP 4	752 000 JUN 17	12 300 000	67 100	67 100	---
1981	----PCCCCC--	AUTO	600 JUN 10	25 OCT 30	267 000 JUN 10	7 480 000	---	---	---
1982	-----CCCCC--	AUTO	5 270 JUL 25	48 OCT 8	2 550 000 JUL 25	24 900 000	---	---	---
1983	----PCCCCP--		1 580 JUL 3	52 SEP 14	796 000 JUL 26	26 200 000	---	---	---
1984	----CCCCCC--		2 420 JUN 1	50 OCT 30	1 090 000 JUN 1	28 700 000	156 000	111 000	39.8
1985	----PCCCCC-P		2 400 DEC 1	14 AUG 30	448 000 DEC 1	10 400 000	---	---	---
1986	----PCCPCC--		1 270 JUN 9	45 OCT 31	534 000 JUN 9	13 600 000	---	---	---
1987	----PCCCCP--		6 860 AUG 11	75 SEP 28	3 660 000 AUG 11	32 900 000	---	---	---
1988	----PCCCCC--		1 460 MAY 30	41 OCT 17	558 000 MAY 29	20 100 000	---	---	---
1989	----PCCCCP--		1 450 JUN 2	63 OCT 15	679 000 JUN 2	16 300 000	---	---	---
1990	----PCCCCP--		10 000 JUN 20 *	0 JUN 20 *	6 670 000 JUN 19 *	53 200 000 *	---	---	---

AUTO - AUTOMATIC SAMPLING MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SMOKY RIVER ABOVE HELLS CREEK - STATION NO. 07GA001

LOCATION: LAT 53 56 46 N LONG 119 09 40 W
DRAINAGE AREA: 3 840 km^2
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-SEP MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1967	------PPPPP-	MANUAL	210 SEP 2	10 NOV 14	--- ---	---	---	---	---
1969	-----CCC----	MANUAL	11 600 AUG 5 *	16 JUL 18	285 000 AUG 6 *	727 000 *	---	---	---
1970	--CCCCCC---	MANUAL	1 220 JUN 4	2 SEP 21 *	48 700 JUN 4	316 000	2 050	2 050	---
1971	---PCCCCC---	MANUAL	3 380 JUN 9	5 SEP 23	103 000 JUN 9	652 000	4 260	3 160	34.9

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SNAKE INDIAN RIVER NEAR THE MOUTH - STATION NO. 07AB002

LOCATION: LAT 53 09 28 N LONG 118 01 58 W
DRAINAGE AREA: 1 580 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	80 JUN 14 *	35 MAY 15 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

LOCATION: LAT 50 44 15 N LONG 110 05 45 W
DRAINAGE AREA: 66 000 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-OCT STANDARD ERROR OF MEAN %
1966	---PCCCCCCCC	MANUAL	2 480 JUN 8	7 OCT 10	195 000 JUN 8	2 430 000	---	---	---
1967	CCCCCCCCCCC	MANUAL	3 880 MAY 11	3 DEC 3	564 000 JUN 3	7 480 000 *	34 700	34 700	---
1968	CCCCCCCCCCC	MANUAL	2 890 JUN 9	2 AUG 11	107 000 JUN 9	1 180 000	5 330	20 000	73.3
1969	CCCCCCCCCCC	MANUAL	4 580 MAY 19	2 SEP 25	452 000 JUL 2	4 550 000	20 500	20 200	42.0
1970	CCCCCCCCCCC	MANUAL	5 490 JUN 17	2 SEP 6	417 000 JUN 17	2 700 000	12 500	18 300	34.4
1971	CCCCCCCCCCC	MANUAL	3 160 JUN 9	1 SEP 30 *	170 000 JUN 10	2 350 000	10 800	16 800	30.3
1972	CCCCCCCCCCC	MANUAL	4 180 MAR 18	3 JAN 26	261 000 JUN 4	4 720 000	19 500	17 200	24.3
1973	CCCCCCCCCCC	MANUAL	1 450 JUN 17	2 JAN 10	46 100 JUN 17	720 000	3 270	15 200	26.6
1974	CCCCCCCCCCC	MANUAL	6 360 MAY 4	2 OCT 19	350 000 MAY 4	4 090 000	19 000	15 700	22.6
1975	CCCCCCCCCCC	MANUAL	13 000 JUN 23 *	1 JAN 6	1 880 000 JUN 23 *	7 460 000	34 800	17 800	21.2
1976	CCCCCCCCCCC	MANUAL	1 310 MAY 15	2 SEP 25	70 800 AUG 10	1 300 000	5 850	16 600	21.5
1977	CCCCCCCCCCC	MANUAL	1 770 JUN 15	3 APR 29	29 800 JUN 15	120 000	496	15 200	23.5
1978	CCCCCCCCCCC	MANUAL	2 560 MAR 28	6 NOV 16	98 700 JUN 10	2 450 000	10 400	14 800	22.1
1979	---CCCCCCC--	MANUAL	1 860 MAY 29	2 JUL 28	102 000 MAY 30	1 160 000	5 400	14 000	22.0
1980	---CCCCCCC--	MANUAL	4 880 MAY 30	6 SEP 1	368 000 MAY 30	2 150 000	10 100	13 800	20.9
1981	--PCCCCCCCP-	MANUAL	4 430 MAY 19	10 OCT 2	579 000 MAY 25	4 590 000	21 400	14 300	19.1
1982	---CCCCCCC--	MANUAL	2 000 JUL 8	6 SEP 12	93 500 JUL 8	1 590 000	7 410	13 800	18.7
1983	--PCCCCCCC--	MANUAL	2 720 JUL 21	4 SEP 25	43 900 JUL 21	416 000	1 940	13 100	19.2
1984	---CCCCCCC--	MANUAL	527 JUN 26	5 MAY 5	9 100 JUN 26	118 000	551	12 400	20.0
1985	----PPPPPP--	MANUAL	457 SEP 17	5 SEP 9	--- ---	---	---	---	---
1986	---PPPPPPP--	MANUAL	565 MAY 28	15 AUG 18	--- ---	---	---	---	---
1987	---PPPPPP-P-	MANUAL	246 MAY 20	9 SEP 29	--- ---	---	---	---	---
1988	---PPPPPP-P-	MANUAL	233 JUN 16	10 APR 18	--- ---	---	---	---	---
1989	----PPPPPP--	MANUAL	304 JUN 20	20 JUL 25	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT - STATION NO. 05AJ001

LOCATION: LAT 50 02 35 N LONG 110 40 40 W
DRAINAGE AREA: 56 400 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAR 28	09:15	4.0	136	97.7	DH59	88	250														
MAY 29	12:30	17.0	1210	97.7	D49	1705	230	14	27	41	63	86	92	96	99	100			8	65	27
JUN 05	18:50	14.0	1360	97.7	D49	921	196	19	23	41	59	79	89	95	99	100			11	66	23
JUN 29	09:00	21.0	538	97.7	DH59	138	185														
JUN 29	09:01	21.0	538	97.7	DH59	126	175														

NOTE: SINGLE VERTICAL IS LOCATED AT 97.7 METRES FOR 1990

SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT - STATION NO. 05AJ001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	------PPPP--	MANUAL	88	JUL 15	9	SEP 11	---	---	---	---	---	---
1975	----PP-PPP--	MANUAL	2 930	JUN 23	5	SEP 15	---	---	---	---	---	---
1976	--PPPPPPPP--	MANUAL	493	MAY 11	1	MAY 5 *	---	---	---	---	---	---
1977	--P-PPPPPP--	MANUAL	53	MAY 24	11	JUN 29	---	---	---	---	---	---
1978	--PPP-PP---P	MANUAL	645	MAR 30	11	DEC 12	---	---	---	---	---	---
1979	----P-P-PP--	MANUAL	808	MAY 31	4	JUL 31	---	---	---	---	---	---
1980	---PPP-P-P--	MANUAL	3 020	MAY 29 *	24	AUG 29	---	---	---	---	---	---
1981	--P-P--PP---	MANUAL	1 760	MAY 26	17	SEP 28	---	---	---	---	---	---
1982	-----PP-PP--	MANUAL	346	JUN 23	42	OCT 27	---	---	---	---	---	---
1983	--PP-PPPP-P-	MANUAL	397	JUN 2	8	SEP 26	---	---	---	---	---	---
1984	---PPPP-PP--	MANUAL	113	SEP 10	4	MAY 15	---	---	---	---	---	---
1985	--PPPPPPPP--	MANUAL	669	MAY 29	11	JUL 31	---	---	---	---	---	---
1986	-PPPPPP-P-P-	MANUAL	2 600	FEB 28	9	SEP 3	---	---	---	---	---	---
1987	---PPPPP----	MANUAL	192	JUL 28	17	JUN 30	---	---	---	---	---	---
1988	--PPPPPPP-P-	MANUAL	97	JUN 29	7	JUL 27	---	---	---	---	---	---
1989	---PPPPPP-P-	MANUAL	901	JUN 14	38	SEP 25	---	---	---	---	---	---
1990	--P-PP------	MANUAL	1 710	MAY 29	88	MAR 28	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SPRAY RIVER AT BANFF - STATION NO. 05BC001

LOCATION: LAT 51 09 35 N LONG 115 33 16 W
DRAINAGE AREA: 749 km²
TYPE OF FLOW: REGULATED SINCE 1949
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-AUG MEAN LOAD (TONNES)	SUMMARY : MAY-AUG HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-AUG STANDARD ERROR OF MEAN %
1972	----CCCCC---	MANUAL	116	AUG 4	0	MAY 10 *	99.0	AUG 4	785	6.28	6.28	---
1973	----CCCC----	MANUAL	395	MAY 31	2	JUL 16	382	MAY 31	4 060	33.0	19.6	68.0
1974	----CCCC----	MANUAL	692	JUL 30 *	5	JUN 30	1 790	JUL 29 *	20 400 *	166	68.3	72.1
1975	----PPPP----	MANUAL	112	JUL 30	2	MAY 29	---	---	---	---	---	---
1976	----PPPP-P--	MANUAL	13	AUG 24	1	JUL 26	---	---	---	---	---	---
1977	---P-PPPP-P-	MANUAL	13	JUL 26	0	NOV 3	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SPRING CREEK (UPPER) NEAR VALLEYVIEW - STATION NO. 07GF004

LOCATION: LAT 54 55 46 N LONG 117 42 20 W
DRAINAGE AREA: 33.4 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1967	----PCCCCCCC	MANUAL	50	JUN 18	0	JUL 9 *	1.6	JUN 18	7.45	---	---	---
1968	---PPPP-----	MANUAL	128	MAY 16 *	6	JUN 4	---	---	---	---	---	---
1969	----CCCC----	MANUAL	42	AUG 28	5	JUN 3	0.8	MAY 1	3.75	---	---	---
1970	CCCCCCCCCC--	MANUAL	25	APR 10	0	JAN 1	0.5	MAY 11	7.46	0.092	0.092	---
1971	--CCCCCCCC--	MANUAL	39	JUN 17	0	MAR 1	10.7	JUL 12	48.4	0.290	0.19	51.7
1972	--CCCCCCCC--	MANUAL	75	JUN 26	0	MAR 1	29.4	JUN 26 *	87.*	0.457	0.28	37.7
1973	--CCCCCCCCP-	MANUAL	79	APR 24	0	MAR 1	10.7	APR 24	75.3	0.349	0.29	25.8
1974	--CCCCCCCCP-	MANUAL	24	MAY 11	0	MAR 1	4.9	APR 26	50.6	0.405	0.31	19.8
1975	----PPP-----	MANUAL	14	JUN 18	8	JUL 9	---	---	---	---	---	---
1978	---P---PPP--	MANUAL	41	APR 27	6	SEP 19	---	---	---	---	---	---
1979	----PPPPP---	MANUAL	95	AUG 8	8	MAY 14	---	---	---	---	---	---
1980	---P-P-PPPP-	MANUAL	68	APR 21	5	JUN 9	---	---	---	---	---	---
1981	--PPPPPPPP--	MANUAL	56	JUL 6	4	MAY 27	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SPRING CREEK NEAR VALLEYVIEW - STATION NO. 07GF002

LOCATION: LAT 54 55 05 N LONG 117 50 55 W
DRAINAGE AREA: 112 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1967	---PCCCCC---	MANUAL	925	APR 29	0	JUL 16 *	465	MAY 1	1 810	---	---	---
1968	----CCCCCC--	MANUAL	16 100	JUN 17 *	0	SEP 4	303	JUN 13	1 170	---	---	---
1969	--CCCCCCCC--	MANUAL	3 900	JUL 18	0	MAR 1	155	JUL 18	1 130	5.31	5.31	---
1970	--CCCCCCCC--	MANUAL	271	APR 22	0	MAR 1	68.8	APR 22	329	2.72	4.01	32.3
1971	--CCCCCCCC--	MANUAL	1 030	JUL 12	0	MAR 1	624	JUL 12	3 200	24.2	10.7	63.0
1972	--CCCCCCCC--	MANUAL	777	APR 28	0	MAR 1	418	APR 28	2 180	9.53	10.4	46.0
1973	--CCCCCCCP-	MANUAL	546	APR 24	0	MAR 1	220	APR 24	1 460	7.29	9.81	38.4
1974	--CCCCCCCC--	MANUAL	1 420	APR 23	0	MAR 1	1 830	APR 24 *	10 200 *	99.5	24.8	61.6
1975	----CCC-----	MANUAL	183	JUN 29	1	JUL 25	25.6	JUN 29	140	---	---	---
1978	---PP--PPP--	MANUAL	829	APR 30	8	AUG 30	---	---	---	---	---	---
1979	----PPPP----	MANUAL	1 570	MAY 16	34	JUL 20	---	---	---	---	---	---
1980	---P-P---PP-	MANUAL	571	APR 17	14	NOV 5	---	---	---	---	---	---
1981	--PPPPPP----	MANUAL	1 700	APR 23	13	AUG 10	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

ST. MARY RIVER AT INTERNATIONAL BOUNDARY - STATION NO. 05AE027

LOCATION: LAT 49 00 12 N LONG 113 18 48 W
DRAINAGE AREA: 1 210 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1977	---PP-------	MANUAL	45	APR 26	29	MAY 10 *	---	---	---	---	---	---
1978	----PP------	MANUAL	395	JUN 8 *	97	JUN 12	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

STEEPBANK RIVER NEAR FORT MCMURRAY - STATION NO. 07DA006

LOCATION: LAT 57 00 14 N LONG 111 24 53 W
DRAINAGE AREA: 1 320 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)		DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 04	08:15	4.0	33.5	MID	X	DH59	247	C	118														

NOTE: SINGLE VERTICAL LOCATED AT 1QRB (ONE QUARTER THE DISTANCE FROM THE RIGHT BANK) FOR 1990

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

STEEPBANK RIVER NEAR FORT MCMURRAY - STATION NO. 07DA006

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1975	-----PP-PP--	MANUAL	741 JUL 19		24 JUN 24		---	---	---	---	---	---
1976	---PP-PPP-P-	MANUAL	709 APR 15		6 NOV 5		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	431 APR 16		3 SEP 22		---	---	---	---	---	---
1978	---PPPPPP----	MANUAL	251 MAY 1		8 JUL 24		---	---	---	---	---	---
1979	----PPPPPP--	MANUAL	116 MAY 30		6 AUG 22		---	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	126 SEP 19		6 JUN 27		---	---	---	---	---	---
1981	----P-PP----	MANUAL	50 JUL 16		3 AUG 28		---	---	---	---	---	---
1982	----PP-PP---	MANUAL	120 MAY 19		3 JUN 25		---	---	---	---	---	---
1983	-----P-PP---	MANUAL	11 JUN 22		3 AUG 7		---	---	---	---	---	---
1984	----P--PP---	MANUAL	75 AUG 11		2 SEP 21	*	---	---	---	---	---	---
1985	---P-P-P----	MANUAL	872 APR 30	*	3 AUG 20		---	---	---	---	---	---
1986	----PP-P----	MANUAL	169 MAY 9		4 AUG 25		---	---	---	---	---	---
1987	----PP-P----	MANUAL	262 MAY 3		4 AUG 28		---	---	---	---	---	---
1988	----PP--P---	MANUAL	134 MAY 6		69 JUN 29		---	---	---	---	---	---
1989	----PP-P-P--	MANUAL	330 MAY 4		18 OCT 25		---	---	---	---	---	---
1990	----P-------	MANUAL	247 MAY 4		247 MAY 4		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

STIMSON CREEK NEAR PEKISKO - STATION NO. 05BL007

LOCATION: LAT 50 25 50 N LONG 114 09 55 W
DRAINAGE AREA: 263 km²
TYPE OF FLOW: REGULATED SINCE 1966
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	312 JUN 7		11 MAY 8	*	---	---	---	---	---	---
1972	--PPP-------	MANUAL	787 APR 7	*	13 MAY 22		---	---	---	---	---	---
1976	----P-------	MANUAL	25 MAY 13		25 MAY 13		---	---	---	---	---	---
1977	----P-------	MANUAL	21 MAY 17		16 MAY 24		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

STRAWBERRY CREEK NEAR THE MOUTH - STATION NO. 05DF004

LOCATION: LAT 53 18 41 N LONG 114 03 02 W
DRAINAGE AREA: 584 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	-----PP-----	MANUAL	1 570 JUL 11	*	5 JUN 26	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

STREETER CREEK (MAIN STEM) NEAR NANTON - STATION NO. 05AB030

LOCATION: LAT 50 07 24 N LONG 114 03 20 W
DRAINAGE AREA: 5.96 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1966	------CCCCCC	MANUAL	16 JUL 20	0 NOV 7 *	0.0JUL 5	0.640	---	---	---
1967	CCCCCCCCCCCC	MANUAL	360 MAY 19	0 JAN 1	6.6JUN 3	76.5	0.264	0.264	---
1968	CCCCCCCCCCCC	MANUAL	147 OCT 8	7 JUN 13	0.3OCT 8	13.0	0.036	0.15	75.9
1969	CCCCCCCCCCCC	MANUAL	540 JUN 27 *	0 DEC 9	16.9JUN 27 *	112 *	0.327	0.20	42.3

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

SWAN RIVER NEAR KINUSO - STATION NO. 07BJ001

LOCATION: LAT 55 19 00 N LONG 115 24 30 W
DRAINAGE AREA: 1 900 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1969	---PCCCCCC--	MANUAL	2 390 SEP 5	5 JUN 30	21 300 SEP 5	70 400	---	---	---
1970	--CCCCCCCCCC	MANUAL	2 950 JUN 16	8 AUG 28	35 000 JUN 29	182 000	851	851	---
1971	CCCCCCCCCCCC	MANUAL	4 580 JUL 3	5 NOV 3	72 800 JUL 4	746 000	3 490	2 170	60.7
1972	CCCCCCCCCCCC	MANUAL	4 450 JUN 18	4 NOV 20	70 000 JUN 18	400 000	1 870	2 070	37.1
1973	CCCCCCCCCCCC	MANUAL	5 350 MAY 21	5 FEB 17	41 900 MAY 21	345 000	1 610	1 950	28.4
1974	CCCCCCCCCCCC	MANUAL	6 540 JUL 12	9 SEP 21	103 000 JUL 13	518 000	2 420	2 050	21.5
1975	---CCCCCCC--	MANUAL	4 020 AUG 31	5 APR 1	88 700 JUN 28	544 000	2 540	2 130	17.3
1976	---PPPP-PP--	MANUAL	1 240 JUL 3	32 OCT 6	--- ---	---	---	---	---
1977	---PPPPPPP--	MANUAL	801 APR 25	9 OCT 27	--- ---	---	---	---	---
1978	---P-PP-PP--	MANUAL	1 310 APR 27	16 OCT 25	--- ---	---	---	---	---
1979	---CCCCCC---	MANUAL	8 640 JUL 1 *	11 SEP 24	140 000 JUN 14	884 000 *	---	---	---
1980	-P-CCCCCCC--	MANUAL	3 370 MAY 28	9 MAY 17	21 700 MAY 28	151 000	705	1 930	19.3
1981	---P-CCCCC--	MANUAL	2 530 JUL 23	5 AUG 26	16 500 JUL 23	58 200	---	---	---
1982	---PCCCCCC--	MANUAL	2 520 MAY 19	1 OCT 23 *	25 000 JUL 16	259 000	---	---	---
1983	---PCCCCCC--	MANUAL	5 170 JUN 26	7 JUN 3	197 000 JUN 26 *	863 000	---	---	---
1984	--PCCCCCCP--	MANUAL	3 650 JUN 8	10 AUG 4	72 400 JUN 8	248 000	---	---	---
1985	---PCCCCCC--	MANUAL	3 800 MAY 4	6 AUG 4	50 300 JUN 25	365 000	---	---	---
1986	---PCCCCCC--	MANUAL	3 820 JUL 18	9 OCT 26	95 400 JUL 18	532 000	---	---	---
1987	---PCCCCCC--	MANUAL	2 280 AUG 1	8 OCT 25	14 900 AUG 1	88 800	---	---	---
1988	---CCCCCCC--	MANUAL	3 250 JUL 7	10 SEP 14	163 000 JUL 7	531 000	2 480	1 990	16.5
1989	---PPPPPPPP-	MANUAL	3 680 MAY 20	9 OCT 27	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

THREEHILLS CREEK NEAR CARBON - STATION NO. 05CE007

LOCATION: LAT 51 33 53 N LONG 113 04 18 W
DRAINAGE AREA: 1 070 km²
TYPE OF FLOW: REGULATED SINCE 1971
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	61 MAY 10 *	61 MAY 10 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

THREEPOINT CREEK NEAR MILLARVILLE - STATION NO. 05BL013

LOCATION: LAT 50 46 14 N LONG 114 16 39 W
DRAINAGE AREA: 507 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	------P-----	MANUAL	501 JUL 4	501 JUL 4	--- ---	---	---	---	---
1971	----PP------	MANUAL	2 800 JUN 6 *	7 JUN 2	--- ---	---	---	---	---
1972	--PPPP------	MANUAL	473 MAY 22	14 APR 11	--- ---	---	---	---	---
1976	----P--PP---	MANUAL	510 AUG 5	6 AUG 3 *	--- ---	---	---	---	---
1977	----P-------	MANUAL	19 MAY 17	19 MAY 17	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

TOUGH CREEK NEAR BEAZER - STATION NO. 05AE039

LOCATION: LAT 49 04 00 N LONG 113 32 00 W
DRAINAGE AREA: 38.6 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1980	-----PPPP----	MANUAL	94 MAY 27 *	16 JUN 16	--- ---	---	---	---	---
1981	-----PPPP---	MANUAL	89 JUL 20	14 JUN 11 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

TROUT CREEK NEAR GRANUM - STATION NO. 05AB005

LOCATION: LAT 49 58 35 N LONG 113 41 07 W
DRAINAGE AREA: 440 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	560 MAY 6 *	481 MAY 6 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

TWIN CREEK NEAR SEEBE - STATION NO. 05BF018

LOCATION: LAT 50 57 33 N LONG 115 10 19 W
DRAINAGE AREA: 2.64 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	SUMMARY : MAR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAR-OCT STANDARD ERROR OF MEAN %
1969	CCCCCCCCCCCC	MANUAL	13 MAY 25	0 JAN 1 *	0.3MAY 25	2.61	0.034	0.034	---
1970	CCCCCCCCCCCC	MANUAL	20 JUN 10	0 JAN 1	0.3JUN 10	3.64	0.017	0.02	33.0
1971	CCCCCCCCCCCC	MANUAL	137 JUN 5 *	0 JAN 1	9.6JUN 5 *	19.*	0.169	0.07	65.8
1972	CCCCCCCCCCCC	MANUAL	17 JUN 10	0 JAN 1	0.8JUN 10	5.47	0.075	0.07	46.2
1973	CCCCCCCCCCCC	MANUAL	11 JUN 7	0 JAN 1	0.3JUN 24	3.91	0.055	0.07	38.1
1974	CCCCCCCCCCCC	MANUAL	35 JUN 17	0 JAN 1	2.0JUN 17	9.56	0.079	0.07	30.5
1975	CC---CCCCCCC	MANUAL	3 JUN 1	0 JAN 19	0.0JUN 13	1.38	---	---	---
1976	----CCCCCCCC	MANUAL	11 JUN 9	0 MAY 1	0.2JUN 9	3.45	---	---	---
1977	CCCCCCCCCCCC	MANUAL	10 JUN 7	0 JAN 1	0.1JUN 7	0.934	0.012	0.06	32.1
1978	CCCCCCCCCCCC	MANUAL	18 JUN 6	0 JAN 1	0.5JUN 6	4.16	0.019	0.05	32.0
1979	CCCCCCCCCP-	MANUAL	9 MAY 27	0 JAN 1	0.1JUN 12	1.75	0.013	0.05	32.2
1980	--CCCCCCCC--	MANUAL	8 MAY 27	1 MAY 15	0.1MAY 27	5.53	0.023	0.05	31.1
1981	----CCCCCC--	MANUAL	12 MAY 27	0 MAY 1	0.4MAY 27	4.14	---	---	---
1982	---CCCCCCC--	MANUAL	18 JUN 19	0 APR 1	0.5JUN 19	5.87	---	---	---
1983	----PCCCC---	MANUAL	2 MAY 29	0 JUN 18	0.0MAY 29	0.794	---	---	---
1986	----P-------	MANUAL	31 MAY 28	31 MAY 28	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

VERMILION RIVER AT VEGREVILLE - STATION NO. 05EE009

LOCATION: LAT 53 29 28 N LONG 112 02 18 W
DRAINAGE AREA: 1 630 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
APR 10	09:50	1.0	3.00	5.0	K DH48	43	232														

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK

VERMILION RIVER AT VEGREVILLE - STATION NO. 05EE009

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1987	----P-------	MANUAL	14 MAY 28	14 MAY 28 *	--- ---	---	---	---	---
1990	---P--------	MANUAL	43 APR 10 *	43 APR 10	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

VERMILION RIVER NEAR HAZELDINE - STATION NO. 05EE004

LOCATION: LAT 53 37 37 N LONG 110 25 20 W
DRAINAGE AREA: 7 830 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1976	---PPPPPP---	MANUAL	135 APR 6	6 AUG 10	--- ---	---	---	---	---
1977	------PPPP--	MANUAL	5 AUG 17	2 OCT 12 *	--- ---	---	---	---	---
1978	---PPPPPP---	MANUAL	16 APR 19	3 AUG 22	--- ---	---	---	---	---
1979	----P-------	MANUAL	173 MAY 15 *	173 MAY 15	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

VERMILION RIVER NEAR MARWAYNE - STATION NO. 05EE007

LOCATION: LAT 53 29 28 N LONG 110 23 51 W
DRAINAGE AREA: 7 270 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
APR 23	15:00	14.0	12.6	11.0 X	DH59	95	344														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

VERMILION RIVER NEAR MARWAYNE - STATION NO. 05EE007

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1979	-------P----	MANUAL			0 AUG 21 *		---	---	---	---	---	---
1980	---PPPPP----	MANUAL	233 APR 16 *		11 JUN 24		---	---	---	---	---	---
1981	---PPP------	MANUAL	23 APR 29		8 JUN 17		---	---	---	---	---	---
1982	-------PPP-P-	MANUAL	77 NOV 3		31 AUG 11		---	---	---	---	---	---
1983	----PPPPPP--	MANUAL	106 JUL 20		14 JUN 9		---	---	---	---	---	---
1984	----PPPPPPP-	MANUAL	45 NOV 7		6 OCT 23		---	---	---	---	---	---
1985	---PPPPP----	MANUAL	127 APR 17		5 JUL 16		---	---	---	---	---	---
1986	---PPPPPPP--	MANUAL	100 APR 9		9 JUL 16		---	---	---	---	---	---
1987	----PPP-----	MANUAL	22 JUN 24		9 JUL 30		---	---	---	---	---	---
1989	----P-PP-P--	MANUAL	25 OCT 2		9 JUL 24		---	---	---	---	---	---
1990	---P--------	MANUAL	95 APR 23		95 APR 23		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

VERMILION RIVER NEAR VEGREVILLE - STATION NO. 05EE003

LOCATION: LAT 53 27 54 N LONG 112 03 52 W
DRAINAGE AREA: 1 590 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	---------P--	MANUAL	5 OCT 9		5 OCT 9 *		---	---	---	---	---	---
1975	---------P--	MANUAL	5 OCT 9		5 OCT 9		---	---	---	---	---	---
1976	---P--------	MANUAL	36 APR 6		15 APR 28		---	---	---	---	---	---
1978	---PP-------	MANUAL	44 APR 20		17 MAY 10		---	---	---	---	---	---
1979	----P-------	MANUAL	23 MAY 14		23 MAY 14		---	---	---	---	---	---
1980	---P--------	MANUAL	52 APR 18		39 APR 28		---	---	---	---	---	---
1981	----P-------	MANUAL	7 MAY 27		7 MAY 27		---	---	---	---	---	---
1982	------PPP---	MANUAL	68 JUL 7 *		22 AUG 12		---	---	---	---	---	---
1983	----P-PPPP--	MANUAL	51 JUL 5		20 SEP 29		---	---	---	---	---	---
1984	----PPP-----	MANUAL	55 JUN 6		17 JUL 11		---	---	---	---	---	---
1985	---PPP------	MANUAL	52 APR 26		8 JUN 27		---	---	---	---	---	---
1986	---P--------	MANUAL	38 APR 24		38 APR 24		---	---	---	---	---	---
1987	---P--------	MANUAL	38 APR 24		38 APR 24		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WAIPAROUS CREEK NEAR THE MOUTH - STATION NO. 05BG006

LOCATION: LAT 51 16 58 N LONG 114 50 15 W
DRAINAGE AREA: 334 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP------	MANUAL	2 860	JUN 6 *	1	JUN 1 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

WAMPUS CREEK NEAR HINTON - STATION NO. 07AF003

LOCATION: LAT 53 09 22 N LONG 117 15 40 W
DRAINAGE AREA: 25.4 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-OCT STANDARD ERROR OF MEAN %
1967	-----CCCCC--	MANUAL	290	JUN 9	0	SEP 1 *	65.9	JUN 9	150	---	---	---
1968	----CCCCCC--	MANUAL	72	JUL 22	1	SEP 17	9.7	JUL 22	78.9	---	---	---
1969	----CCCCCC--	MANUAL	3 140	AUG 5 *	0	SEP 19	752	AUG 5	1 970	---	---	---
1970	----CCCCCC--	MANUAL	167	MAY 10	0	OCT 7	47.5	JUN 16	185	---	---	---
1971	---CCCCCCC--	MANUAL	408	JUN 9	0	APR 1	186	JUN 9	592	3.27	3.27	---
1972	----CCCCCC--	MANUAL	562	JUN 25	1	AUG 20	336	JUN 25	737	---	---	---
1973	---CCCCCCC--	MANUAL	301	MAY 16	0	APR 1	135	MAY 16	755	3.81	3.54	7.7
1974	---CCCCCCC--	MANUAL	402	JUL 11	0	APR 1	13.7	MAY 6	175	0.890	2.66	33.8
1975	---CCCCCCC--	MANUAL	118	MAY 9	1	APR 1	8.6	MAY 9	68.1	0.318	2.07	41.6
1976	---CCCCCCC--	MANUAL	111	JUN 16	1	APR 1	11.6	JUN 16	98.0	0.458	1.75	42.4
1977	---CCCCCCC--	MANUAL	550	MAY 29	2	OCT 22	233	MAY 29	1 340	6.25	2.50	38.6
1978	---CCCCCCC--	MANUAL	500	JUL 11	3	APR 1	145	MAY 16	464	2.17	2.45	33.3
1979	----CCCCC---	MANUAL	136	JUN 20	0	JUL 18	12.1	JUN 20	73.3	---	---	---
1980	---CCCCC----	MANUAL	1 370	JUN 4	1	SEP 10	1 830	JUN 4 *	3 500 *	---	---	---
1981	----CCCCCP--	MANUAL	237	MAY 15	1	MAY 1	40.2	JUL 30	252	---	---	---
1982	---CCCCCCCP-	MANUAL	1 010	JUL 4	1	APR 1	364	JUL 4	817	3.79	2.62	27.7
1983	---CCCCCCCP-	MANUAL	276	JUN 24	0	JUL 29	30.5	JUN 24	96.8	0.462	2.38	28.7
1984	--PCCCCCCC--	MANUAL	268	MAY 16	0	MAY 12	13.5	JUN 8	109	0.620	2.20	28.9
1985	---CCCCCCC--	MANUAL	1 620	AUG 15	0	APR 20	44.2	AUG 15	170	0.811	2.08	28.4
1986	----PCCCCC--	MANUAL	747	JUL 16	0	JUN 5	270	JUL 17	630	---	---	---

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

WASKATENAU CREEK NEAR WASKATENAU - STATION NO. 05EC002

LOCATION: LAT 54 07 23 N LONG 112 46 58 W
DRAINAGE AREA: 312 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	-------PP---	MANUAL	7	AUG 14	5	SEP 19	---	---	---	---	---	---
1975	------PPPP--	MANUAL	3	JUL 14	1	SEP 10	---	---	---	---	---	---
1976	---PPPP-P---	MANUAL	159	APR 4 *	6	MAY 20	---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	8	APR 18	1	AUG 9	---	---	---	---	---	---
1978	---PPPPPPP--	MANUAL	24	APR 13	2	JUL 27	---	---	---	---	---	---
1979	---PPPPPP---	MANUAL	79	APR 22	0	AUG 23 *	---	---	---	---	---	---
1980	---P-PPPP---	MANUAL	7	APR 23	5	JUL 14	---	---	---	---	---	---
1981	----P-------	MANUAL	12	MAY 27	12	MAY 27	---	---	---	---	---	---
1982	---P--------	MANUAL	9	APR 27	9	APR 27	---	---	---	---	---	---
1985	---PPP------	MANUAL	11	MAY 22	5	APR 24	---	---	---	---	---	---
1986	---PP-------	MANUAL	8	APR 15	5	MAY 13	---	---	---	---	---	---
1987	---P--------	MANUAL	12	APR 14	8	APR 30	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH
* - EXTREME FOR PERIOD OF RECORD

WATERTON RIVER NEAR GLENWOOD - STATION NO. 05AD028

LOCATION: LAT 49 26 35 N LONG 113 28 10 W
DRAINAGE AREA: 1 630 km²
TYPE OF FLOW: REGULATED SINCE 1966
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 30	11:05	6.0	98.8	4.0 K	DH48	229	162	02	04	21	37	61	85	97	100				15	81	4

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990
VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL,FROM LEFT BANK

WATERTON RIVER NEAR GLENWOOD - STATION NO. 05AD028

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1974	------P-PP--	MANUAL	6 JUL 24		1 OCT 8		---	---	---	---	---	---
1975	----PPP-PPP-	MANUAL	124 MAY 13		0 SEP 3	*	---	---	---	---	---	---
1976	---PPPPPPP--	MANUAL	43 APR 14		4 JUL 29		---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	29 OCT 18		2 APR 26		---	---	---	---	---	---
1978	---PPPPPP-P-	MANUAL	1 120 MAY 17	*	5 NOV 2		---	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	113 MAY 30		0 JUL 26		---	---	---	---	---	---
1980	--PPPP-PPP-	MANUAL	156 MAY 5		3 JUL 31		---	---	---	---	---	---
1981	--PPPPPPP-P-	MANUAL	233 MAY 27		3 AUG 24		---	---	---	---	---	---
1982	---PPPPPP---	MANUAL	42 JUN 23		1 AUG 25		---	---	---	---	---	---
1983	---PPPPPP-P-	MANUAL	151 MAY 30		4 JUL 26		---	---	---	---	---	---
1984	--PPPPPP----	MANUAL	36 JUN 26		3 MAY 1		---	---	---	---	---	---
1985	---PPPPPPP--	MANUAL	53 MAY 29		2 MAY 1		---	---	---	---	---	---
1986	--PPPPPP--P-	MANUAL	149 JUN 2		1 JUN 25		---	---	---	---	---	---
1987	--PPPPPPP-P-	MANUAL	125 APR 6		1 JUN 23		---	---	---	---	---	---
1988	--P-PPPPP-P-	MANUAL	83 JUN 29		4 SEP 29		---	---	---	---	---	---
1989	---PPP-PPP--	MANUAL	102 JUN 13		1 AUG 1		---	---	---	---	---	---
1990	----P-------	MANUAL	229 MAY 30		229 MAY 30		---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WEST ARROWWOOD CREEK NEAR ARROWWOOD - STATION NO. 05BM014

LOCATION: LAT 50 45 50 N LONG 113 14 00 W
DRAINAGE AREA: 775 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----P-------	MANUAL	163 MAY 9	*	163 MAY 9		---	---	---	---	---	---
1976	----P-------	MANUAL	16 MAY 14		16 MAY 14		---	---	---	---	---	---
1977	----P-------	MANUAL	4 MAY 17		4 MAY 17	*	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING
P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WEST PRAIRIE RIVER NEAR HIGH PRAIRIE - STATION NO. 07BF002

LOCATION: LAT 55 26 50 N LONG 116 29 30 W
DRAINAGE AREA: 1 160 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1973	----P-------	MANUAL	2 050	MAY 1	1 290	MAY 1	---	---	---	---	---	---
1974	---PP--P-P--	MANUAL	3 260	APR 23	13	AUG 29	---	---	---	---	---	---
1975	---PPP-PP---	MANUAL	1 630	APR 26	22	SEP 26	---	---	---	---	---	---
1976	---PPPPPPP--	MANUAL	6 930	JUN 27	47	OCT 29	---	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	2 430	APR 13	15	SEP 21	---	---	---	---	---	---
1978	------PPP--	MANUAL	76	SEP 27	13	AUG 28	---	---	---	---	---	---
1979	---PPPPPP---	MANUAL	4 250	JUL 4	26	SEP 19	---	---	---	---	---	---
1980	----PPPPPP--	MANUAL	341	JUN 3	19	OCT 27	---	---	---	---	---	---
1981	----P-P-----	MANUAL	253	MAY 27	10	JUL 7	---	---	---	---	---	---
1982	---PP-P-PP--	MANUAL	1 280	MAY 3	40	OCT 4	---	---	---	---	---	---
1983	---P-PPPPP--	MANUAL	8 600	JUL 28 *	33	OCT 24	---	---	---	---	---	---
1984	---PPPP-P---	MANUAL	5 730	JUN 9	7	SEP 4	---	---	---	---	---	---
1985	---PPPPPP---	MANUAL	2 140	MAY 6	6	JUL 25 *	---	---	---	---	---	---
1986	---PPPPPPP--	MANUAL	2 320	APR 22	6	AUG 25	---	---	---	---	---	---
1987	---PPP-PPP--	MANUAL	109	APR 22	12	SEP 28	---	---	---	---	---	---
1988	---PPPPPP---	MANUAL	5 050	JUL 8	6	SEP 29	---	---	---	---	---	---
1989	---PPPPPPP--	MANUAL	3 260	MAY 24	13	SEP 28	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WEST STREETER CREEK NEAR NANTON - STATION NO. 05AB022

LOCATION: LAT 50 06 29 N LONG 114 03 59 W
DRAINAGE AREA: 1.37 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1965	CCCCCCCCCCCC	MANUAL	40	JUL 1 *	0	JAN 1 *	0.0	JUN 18	0.122	0.008	0.008	---
1966	CCCCCCCCCCCC	MANUAL	20	JUN 6	0	JAN 1	0.0	JUN 6 *	0.*	0.005	0.00	25.8
1967	CCCCCCCCCCCC	MANUAL			0	JAN 1	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

WHIRLPOOL RIVER NEAR THE MOUTH - STATION NO. 07AA009

LOCATION: LAT 52 43 29 N LONG 117 55 29 W
DRAINAGE AREA: 590 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1971	----PP-P----	MANUAL	230	JUN 3	14	MAY 22 *	---	---	---	---	---	---
1972	----PP------	MANUAL	763	JUN 1 *	17	MAY 18	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WHISKEYJACK CREEK NEAR HINTON - STATION NO. 07AD004

LOCATION: LAT 53 22 50 N LONG 117 32 15 W
DRAINAGE AREA: 3.13 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-OCT MEAN LOAD (TONNES)	SUMMARY : MAY-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-OCT STANDARD ERROR OF MEAN %
1966	-----CCCC---	MANUAL	13 JUL 15	1 JUL 22	0.1AUG 5	1.82	---	---	---
1967	----CCCCC---	MANUAL	45 JUN 9	0 SEP 9 *	0.6JUN 9	3.15	---	---	---
1968	----PCCCCC--	MANUAL	32 MAY 24	1 MAY 8	0.0JUN 29	0.521	---	---	---
1969	----CCCCCCCC	MANUAL	21 MAY 9	0 SEP 27	0.0JUL 5	1.45	0.010	0.010	---
1970	--CCCCCCCC--	MANUAL	68 JUN 16	0 MAR 1	0.3JUN 16	1.89	0.013	0.01	15.3
1971	----CCCCCC--	MANUAL	40 JUL 11	0 SEP 27	0.8JUL 11	6.14	0.041	0.02	46.5
1972	--CCCCCCCCCC	MANUAL	63 MAY 18	0 MAR 1	0.5JUN 25	5.62	0.031	0.02	31.2
1973	----CCCCCCCC	MANUAL	24 MAY 28	0 OCT 9	0.3MAY 28	2.27	0.014	0.02	27.9
1974	----PCCCCCCC	MANUAL	23 JUL 12	0 SEP 1	0.1JUL 12	1.37	---	---	---
1975	----CCCCCCC-	MANUAL	39 JUN 28	0 JUL 19	0.1JUN 28	0.642	0.005	0.01	30.0
1976	---PCCCCCC--	MANUAL	61 AUG 16	0 MAY 5	0.3AUG 16	0.658	0.004	0.01	31.3
1977	---PCCCCCC--	MANUAL	145 MAY 11	0 SEP 21	1.3MAY 11	8.23	0.046	0.02	28.5
1978	----CCCCCC--	MANUAL	304 JUL 11 *	0 AUG 31	4.6JUL 11 *	12.8	0.079	0.02	30.5
1979	----PPPCCC--	MANUAL	61 JUL 5	0 AUG 29	0.0JUL 31	0.290	---	---	---
1980	-------PP---	MANUAL	6 AUG 8	1 AUG 19	--- ---	---	---	---	---
1981	---PCCCCCP-	MANUAL	57 JUL 23	1 JUN 24	0.4JUL 23	3.24	0.018	0.02	28.5

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WILDHAY RIVER NEAR HINTON - STATION NO. 07AC001

LOCATION: LAT 53 31 24 N LONG 117 56 49 W
DRAINAGE AREA: 959 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1969	-----P------	MANUAL	38 JUN 3	38 JUN 3	--- ---	---	---	---	---
1972	----PP------	MANUAL	2 970 JUN 12 *	26 MAY 17 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WILLOW CREEK ABOVE CHAIN LAKES - STATION NO. 05AB028

LOCATION: LAT 50 11 47 N LONG 114 12 46 W
DRAINAGE AREA: 162 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1965	-----CCCCC--	MANUAL	1 690 JUN 17	1 AUG 14	2 230 JUN 18	5 400	---	---	---
1966	--CCCCCCCCCC	MANUAL	1 760 JUN 4	1 JUL 27	672 JUN 5	2 330	---	---	---
1967	CCCCCCCCCCCC	MANUAL	2 120 MAY 31	2 JUL 31	7 160 MAY 31 *	30 900 *	84.6	84.6	---
1968	CCCCCCCCCCCC	MANUAL	190 APR 1	1 JUL 17	64.4 JUN 7	586	1.60	43.1	96.3
1969	CCCCCCCCCCCC	MANUAL	2 160 JUN 28 *	0 JUL 24 *	4 890 JUN 29	18 700	52.5	46.2	52.3
1970	CCCCCCCCCCCC	MANUAL	1 780 MAY 5	0 SEP 4	801 MAY 5	3 300	11.3	37.5	51.2
1971	CCCCCCCCCCCC	MANUAL	178 JUN 6	0 JUN 22	180 JUN 6	658	1.91	30.4	54.2
1972	CCCCCCCCCCCC	MANUAL	107 AUG 23	0 JUN 21	68.5 MAY 14	1 130	3.22	25.9	54.9
1973	CCCCCCCCCCCC	MANUAL	688 MAY 25	0 NOV 15	340 MAY 25	1 250	3.92	22.7	54.6
1974	CCCCCCCCCCCC	MANUAL	393 APR 27	0 JAN 1	374 APR 27	1 710	5.65	20.6	53.2
1975	CCCCCCCCCCCC	MANUAL	1 770 JUN 20	1 JAN 1	4 620 JUN 20	8 930	24.5	21.0	46.0
1976	CCCCCCCCCCCC	MANUAL	660 AUG 6	0 SEP 19	1 190 AUG 6	2 970	8.25	19.7	44.3
1977	CCCCCCCCCCCC	MANUAL	26 APR 6	0 DEC 27	2.3 APR 6	45.8	0.127	18.0	45.1
1978	PPPPPPPPPP--	MANUAL	40 MAR 17	0 JAN 3	--- ---	---	---	---	---
1980	---PPPPPP-P-	MANUAL	29 MAY 29	4 AUG 26	--- ---	---	---	---	---
1981	--P-PP-PPP--	MANUAL	413 MAY 22	4 SEP 2	--- ---	---	---	---	---
1982	---PPPP-P---	MANUAL	44 JUN 7	1 SEP 14	--- ---	---	---	---	---
1983	---PPPPP-P--	MANUAL	40 MAY 25	2 JUL 19	--- ---	---	---	---	---
1984	---PPPP-----	MANUAL	28 APR 5	1 MAY 1	--- ---	---	---	---	---
1985	----PPPPPP--	MANUAL	31 JUL 11	2 MAY 1	--- ---	---	---	---	---
1986	---PPPPPP---	MANUAL	82 MAY 22	3 APR 1	--- ---	---	---	---	---
1987	---P-PPPP-P-	MANUAL	31 JUL 20	3 AUG 31	--- ---	---	---	---	---
1988	---PPPPPP-P-	MANUAL	71 NOV 2	3 JUL 26	--- ---	---	---	---	---
1989	----PPPPPP--	MANUAL	12 MAY 4	2 AUG 31	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WILLOW CREEK NEAR CLARESHOLM - STATION NO. 05AB021

LOCATION: LAT 50 01 05 N LONG 113 42 50 W
DRAINAGE AREA: 1 160 km²
TYPE OF FLOW: REGULATED SINCE 1966
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 30	13:30	11.0	37.2	15.0	K	D49	608	211	16	28	45	59	78	88	96	100				12	60	28
MAY 31	11:13	11.0	33.6	15.0	K	D49	475	223	18	26	49	62	79	90	97	100				10	64	26

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

VERTICAL SYMBOL(S): K - NOT AT REGULAR SINGLE SAMPLING VERTICAL, FROM LEFT BANK

ALBERTA

WILLOW CREEK NEAR CLARESHOLM - STATION NO. 05AB021

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)			SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)			SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1964	---CCCCCCCCC	MANUAL	3 150	MAY 6		13	OCT 1		7 800	MAY 7		59 100	---	---	---
1965	CCCCCCCCCCC	MANUAL	5 290	JUN 18		3	SEP 16		9 860	JUN 18		27 000	73.9	73.9	---
1966	CCCCCCCCCCC	MANUAL	2 490	JUN 5		4	AUG 25		6 580	JUN 5		23 800	65.1	69.5	6.3
1967	CCCCCCCCCCC	MANUAL	4 710	MAY 31		4	OCT 9		31 300	MAY 31		139 000	380	173	59.9
1968	CCCCCCCCCCC	MANUAL	1 230	JUN 12		3	JAN 28		537	JUN 8		3 620	9.89	132	51.4
1969	CCCCCCCCCCC	MANUAL	5 440	JUN 30	*	0	SEP 29	*	40 600	JUN 30	*	216 000	* 619	230	51.0
1970	CCCCCCCCCCC	MANUAL	3 920	JUN 14		0	OCT 22		12 300	JUN 14		28 000	77.7	204	48.4
1971	CCCCCCCCCCC	MANUAL	1 030	JUN 7		1	OCT 30		2 020	JUN 7		10 200	27.9	179	48.7
1972	CCCCCCCCCCC	MANUAL	2 060	MAR 11		0	OCT 2		5 960	MAY 26		44 100	126	172	44.0
1973	CCCCCCCCCCC	MANUAL	779	MAY 27		1	OCT 4		2 080	MAY 27		10 200	27.8	156	44.0
1974	CCCCCCCCCCC	MANUAL	2 410	MAY 1		1	OCT 18		5 540	MAY 1		38 700	106	151	40.8
1975	PPPPPPPPPPP	MANUAL	5 210	JUN 20		6	JAN 6		---	---		---	---	---	---
1976	--PPPPPPP-P-	MANUAL	268	AUG 12		4	NOV 3		---	---		---	---	---	---
1977	---PPPPPPP---	MANUAL	19	APR 13		1	OCT 31		---	---		---	---	---	---
1978	--PPPPPPP---	MANUAL	764	MAR 26		2	OCT 30		---	---		---	---	---	---
1979	---PPPPPPP---	MANUAL	121	MAY 28		0	AUG 20		---	---		---	---	---	---
1980	--PPPPP-P-P-	MANUAL	187	APR 14		6	JUL 28		---	---		---	---	---	---
1981	--PPPPPPPP---	MANUAL	1 670	MAY 23		5	OCT 26		---	---		---	---	---	---
1982	---PPPPPP----	MANUAL	130	APR 23		6	SEP 27		---	---		---	---	---	---
1983	----PP-PPP---	MANUAL	28	JUN 24		4	OCT 31		---	---		---	---	---	---
1984	--PP-PP-----	MANUAL	9	JUL 30		3	JUN 25		---	---		---	---	---	---
1985	----P-PPP-P-	MANUAL	12	MAY 31		3	NOV 1		---	---		---	---	---	---
1986	---PPPPP-P-	MANUAL	185	MAY 1		3	SEP 9		---	---		---	---	---	---
1987	---PPPPP-P-	MANUAL	43	APR 6		5	JUN 22		---	---		---	---	---	---
1988	---PPPPP-P-	MANUAL	36	APR 26		5	JUL 26		---	---		---	---	---	---
1989	---PPPPPPP--	MANUAL	31	APR 17		3	JUL 25		---	---		---	---	---	---
1990	----P-------	MANUAL	608	MAY 30		475	MAY 31		---	---		---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

WOLVERINE CREEK NEAR VALLEYVIEW - STATION NO. 07GF003

LOCATION: LAT 54 55 17 N LONG 117 48 32 W
DRAINAGE AREA: 11.1 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)			SAMPLED CONCENTRATION MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)			SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1967	---CCCCCC---	MANUAL	1 300	APR 27		0	APR 1	*	56.6	APR 27		351	* ---	---	---
1968	--PCCJCCCC--	MANUAL	276	JUN 12		0	MAR 14		56.3	JUN 12		99.7	---	---	---
1969	----CCCCCC--	MANUAL	4 320	JUL 18	*	0	JUL 11		125	JUL 18	*	129	---	---	---
1970	--CCCCCCCC--	MANUAL	447	APR 21		0	MAR 1		11.5	MAY 17		105	1.73	1.73	---
1971	--CCCCCCCC--	MANUAL	499	APR 23		0	MAR 1		24.8	JUL 12		131	1.29	1.51	14.3
1972	--CCCCCCCC--	MANUAL	520	JUN 26		0	MAR 1		19.6	JUN 26		159	1.15	1.39	12.4
1973	--CCCCCCCC--	MANUAL	376	JUN 11		0	MAR 1		17.9	JUN 11		109	0.691	1.22	17.5
1974	--CCCCCCCC--	MANUAL	569	APR 23		0	MAR 1		48.9	APR 23		251	2.51	1.48	20.9
1975	----PP------	MANUAL	11	JUN 18		4	MAY 29		---	---		---	---	---	---
1978	-------PPP--	MANUAL	60	SEP 19		4	OCT 17		---	---		---	---	---	---
1979	----PPP-----	MANUAL	365	MAY 17		22	JUL 20		---	---		---	---	---	---
1980	-----P---PP-	MANUAL	13	OCT 8		8	JUN 10		---	---		---	---	---	---
1981	--PPPPP--PP-	MANUAL	194	JUL 27		8	JUN 10		---	---		---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NAME	STATION NO.	PAGE
ALBERTA		
ALKALI CREEK NEAR THE MOUTH	05CK005	1
ATHABASCA RIVER AT EMBARRAS AIRPORT	07DD001	1
ATHABASCA RIVER AT MCMURRAY	07CC002	2
ATHABASCA RIVER BELOW MCMURRAY	07DA001	2
ATHABASCA RIVER NEAR WINDFALL	07AE001	3
ATUSIS CREEK NEAR REDLAND	05CE008	3
BATTLE RIVER NEAR THE SASKATCHEWAN BOUNDARY	05FE004	3
BEARBERRY CREEK NEAR SUNDRE	05CA011	4
BEAVER CREEK NEAR BROCKET	05AB013	4
BEAVER MINES CREEK NEAR BEAVER MINES	05AA010	4
BEAVER RIVER ABOVE SYNCRUDE	07DA018	4
BEAVER RIVER AT COLD LAKE RESERVE	06AD006	5
BEAVER RIVER NEAR FORT MACKAY	07DA005	5
BELLY RIVER NEAR GLENWOOD	05AD041	5
BELLY RIVER NEAR MOUNTAIN VIEW	05AD005	6
BELLY RIVER NEAR STAND OFF	05AD002	6
BIG POINT CHANNEL BELOW DIVERGENCE	07DD006	7
BIRCH RIVER BELOW ALICE CREEK	07KE001	7
BLINDMAN RIVER NEAR BLUFFTON	05CC008	8
BLOOD INDIAN CREEK NEAR THE MOUTH	05CK001	8
BOW RIVER AT BANFF	05BB001	8
BOW RIVER AT CALGARY	05BH004	8
BOW RIVER AT LAKE LOUISE	05BA001	9
BOW RIVER BELOW BASSANO DAM	05BM004	9
BOYER RIVER NEAR FORT VERMILION	07JF002	10
BRIDLEBIT CREEK NEAR VALLEYVIEW	07GF005	10
BULLPOUND CREEK NEAR HANNA	05CG002	10
CABIN CREEK NEAR SEEBE	05BF019	11
CACHE PERCOTTE CREEK NEAR HINTON	07AD003	11
CARDINAL RIVER NEAR THE MOUTH	05DD008	11
CASTLE RIVER AT RANGER STATION	05AA028	12
CASTLE RIVER NEAR BEAVER MINES	05AA022	12
CATARACT CREEK NEAR FORESTRY ROAD	05BL022	12
CHENAL DES QUATRE FOURCHES BELOW FOUR FORKS	07KF006	13
CLEARWATER RIVER AT DRAPER	07CD001	13
CLEARWATER RIVER NEAR ROCKY MOUNTAIN HOUSE	05DB001	14
CONNOR CREEK NEAR FOOTHORT BRIDGE	07BB010	14
CONNOR CREEK NEAR SANGUDO	07BB009	14
CROWFOOT CREEK NEAR CLUNY	05BM008	14
CROWSNEST RIVER AT FRANK	05AA008	15
DEER CREEK (MAIN STEM) NEAR SUNDRE	05CA003	15
DEERLICK CREEK NEAR HINTON	07AF004	16
DOVER RIVER NEAR THE MOUTH	07DB002	16
DRIFTPILE RIVER NEAR DRIFTPILE	07BH003	16
DUNKIRK RIVER NEAR FORT MACKAY	07DB003	17
DUTCH CREEK NEAR THE MOUTH	05AA026	17
EAST PRAIRIE RIVER NEAR ENILDA	07BF001	17
EAST STREETER CREEK NEAR NANTON	05AB024	18
ELBOW RIVER ABOVE ELBOW FALLS	05BJ006	18
ELBOW RIVER AT BRAGG CREEK	05BJ004	18
ELLS RIVER NEAR THE MOUTH	07DA017	19
EMBARRAS RIVER BELOW DIVERGENCE	07DD003	19
EMBARRAS RIVER BREAKTHROUGH TO MAMAWI LAKE	07KF015	20
EUNICE CREEK NEAR HINTON	07AF005	21
FIDDLE RIVER ABOVE MORRIS CREEK	07AA010	21
FIREBAG RIVER NEAR THE MOUTH	07DC001	21
FISH CREEK NEAR PRIDDIS	05BK001	22
FLETCHER CHANNEL BELOW DIVERGENCE	07DD004	22
FORTY MILE CREEK NEAR BANFF	05BB003	23
FREEMAN RIVER NEAR FORT ASSINIBOINE	07AH001	23
GOOSE ISLAND CHANNEL BELOW DIVERGENCE	07DD005	23
HANGINGSTONE RIVER AT FORT MCMURRAY	07CD004	24
HARTLEY CREEK NEAR FORT MACKAY	07DA009	24
HIGHWOOD RIVER AT DIEBEL'S RANCH	05BL019	25
HIGHWOOD RIVER BELOW LITTLE BOW CANAL	05BL004	25
HIGHWOOD RIVER BELOW PICKLEJAR CREEK	05BL021	25
HIGHWOOD RIVER NEAR ALDERSYDE	05BL009	26
HIGHWOOD RIVER NEAR THE MOUTH	05BL024	26
HORSE CREEK NEAR VALLEYVIEW	07GF007	27
IRON CREEK NEAR HARDISTY	05FB002	27
JACKFISH CREEK ABOVE ATHABASCA RIVER	07DD009	28
JAMES RIVER NEAR SUNDRE	05CA002	28
JOSLYN CREEK NEAR FORT MACKAY	07DA016	28
JUMPINGPOUND CREEK NEAR THE MOUTH	05BH009	29
KANANASKIS RIVER ABOVE LOWER LAKE	05BF002	29
KEG RIVER AT HIGHWAY NO. 35	07HF002	29
LAKE CLAIRE NEAR OUTLET TO PRAIRIE RIVER	07KF002	30
LEE CREEK AT BEAZER	05AE037	30
LEE CREEK AT CARDSTON	05AE002	30
LESSER SLAVE LAKE AT SLAVE LAKE	07BJ006	30
LESSER SLAVE RIVER AT HIGHWAY NO. 2A	07BK006	31
LESSER SLAVE RIVER AT SLAVE LAKE	07BK001	31
LETHBRIDGE NORTHERN IRRIGATION DISTRICT CANAL AT MENZAGHIES BRID	05AB016	32
LITTLE PADDLE RIVER NEAR MAYERTHORPE	07BB005	32
LITTLE RED DEER RIVER NEAR WATER VALLEY	05CB002	32
LITTLE SMOKY RIVER AT LITTLE SMOKY	07GG002	33
LLOYD CREEK NEAR BLUFFTON	05CC009	33
LOVETT RIVER NEAR THE MOUTH	07BA003	33
MACKAY RIVER NEAR FORT MACKAY	07DB001	34
MAMAWI LAKE CHANNEL AT DOG CAMP	07KF010	34
MAMAWI LAKE CHANNEL AT OLD DOG CAMP	07KF003	34
MANYBERRIES CREEK AT BRODIN'S FARM	05AF010	35
MARMOT CREEK MAIN STEM NEAR SEEBE	05BF016	35
MCLEOD RIVER ABOVE EMBARRAS RIVER	07AF002	35
MCLEOD RIVER NEAR WHITECOURT	07AG004	36
MCLEOD RIVER NEAR WOLF CREEK	07AG001	36
MEADOW CREEK NEAR THE MOUTH	05AB029	37
MICHICHI CREEK AT DRUMHELLER	05CE020	37
MIDDLE FORK CREEK IN CIRQUE NEAR SEEBE	05BF020	37
MIDDLE FORK CREEK NEAR SEEBE	05BF017	38
MIDDLE STREETER CREEK NEAR NANTON	05AB023	38
MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY	11AA031	38
MILK RIVER AT HIGHWAY NO. 880	11AA036	39
MILK RIVER AT MILK RIVER	11AA005	39
MILK RIVER AT WESTERN CROSSING OF INTERNATIONAL BOUNDARY	11AA025	39

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MILK RIVER NEAR PENDANT D'OREILLE	11AA035	40
MILK RIVER NEAR WRITING-ON-STONE PARK	11AA034	40
MILL CREEK NEAR THE MOUTH	05AA011	40
MISTAYA RIVER NEAR SASKATCHEWAN CROSSING	05DA007	40
MUSKEG RIVER NEAR FORT MACKAY	07DA008	41
NORTH FORK MILK RIVER ABOVE ST. MARY CANAL	11AA032	41
NORTH MILK RIVER NEAR INTERNATIONAL BOUNDARY	11AA001	42
NORTH SASKATCHEWAN RIVER AT EDMONTON	05DF001	42
NORTH SASKATCHEWAN RIVER AT SAUNDERS	05DC002	43
NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT	05DA009	43
NORTH SASKATCHEWAN RIVER NEAR ROCKY MOUNTAIN HOUSE	05DC001	44
NOTIKEWIN RIVER AT MANNING	07HC001	44
OLDMAN RIVER NEAR BROCKET	05AA024	45
OLDMAN RIVER NEAR LETHBRIDGE	05AD007	48
OLDMAN RIVER NEAR WALDRON'S CORNER	05AA023	53
PADDLE RIVER AT BARRHEAD	07BB006	55
PADDLE RIVER NEAR ROCHFORT BRIDGE	07BB004	55
PEACE RIVER AT DUNVEGAN BRIDGE	07FD003	56
PEACE RIVER AT PEACE POINT	07KC001	56
PEACE RIVER AT PEACE RIVER	07HA001	58
PEIGAN CREEK NEAR PAKOWKI ROAD	05AH041	61
PEKISKO CREEK NEAR LONGVIEW	05BL023	61
PEMBINA RIVER AT JARVIE	07BC002	62
PEMBINA RIVER NEAR ENTWISTLE	07BB002	62
PINCHER CREEK AT PINCHER CREEK	05AA004	63
PINE CREEK NEAR GRASSLAND	07CA005	63
PIPESTONE RIVER NEAR LAKE LOUISE	05BA002	63
PIYAMI DRAIN NEAR PICTURE BUTTE	05AD037	64
PONTON RIVER ABOVE BOYER RIVER	07JF003	64
POPLAR CREEK NEAR FORT MCMURRAY	07DA007	64
PRAIRIE CREEK NEAR ROCKY MOUNTAIN HOUSE	05DB002	65
PRAIRIE RIVER NEAR LAKE CLAIRE	07KF014	65
RACEHORSE CREEK NEAR THE MOUTH	05AA027	65
RAM RIVER NEAR THE MOUTH	05DC006	65
RAY CREEK NEAR INNISFAIL	05CE010	66
RED DEER RIVER AT DRUMHELLER	05CE001	66
RED DEER RIVER AT RED DEER	05CC002	67
RED DEER RIVER AT SUNDRE	05CA010	68
RED DEER RIVER BELOW BURNT TIMBER CREEK	05CA009	68
RED DEER RIVER NEAR BINDLOSS	05CK004	69
REDWATER RIVER NEAR REDWATER	05EC003	69
REVILLON COUPE BELOW RIVIERE DES ROCHERS	07NA004	69
RIBSTONE CREEK NEAR CZAR	05FD005	70
RIVIERE DES ROCHERS AT BEN HOULE'S CABIN	07NA002	70
ROCKY CREEK NEAR VALLEYVIEW	07GF006	70
ROSEBUD RIVER BELOW CARSTAIRS CREEK	05CE006	71
ROSS CREEK NEAR IRVINE	05AH003	71
SAGE CREEK AT Q RANCH NEAR WILDHORSE	11AA026	71
SAKWATAMAU RIVER NEAR WHITECOURT	07AH003	71
SAND RIVER NEAR THE MOUTH	06AB001	72
SAWRIDGE CREEK NEAR SLAVE LAKE	07BK009	72
SEVEN PERSONS CREEK AT MEDICINE HAT	05AH005	72
SHEEP RIVER AT BLACK DIAMOND	05BL014	73
SHEEP RIVER AT OKOTOKS	05BL012	73
SIFFLEUR RIVER NEAR THE MOUTH	05DA002	73
SIMONETTE RIVER NEAR GOODWIN	07GF001	74
SLAVE RIVER AT FITZGERALD	07NB001	75
SMOKY RIVER ABOVE HELLS CREEK	07GA001	78
SNAKE INDIAN RIVER NEAR THE MOUTH	07AB002	79
SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41	05AK001	79
SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT	05AJ001	79
SPRAY RIVER AT BANFF	05BC001	80
SPRING CREEK (UPPER) NEAR VALLEYVIEW	07GF004	80
SPRING CREEK NEAR VALLEYVIEW	07GF002	81
ST. MARY RIVER AT INTERNATIONAL BOUNDARY	05AE027	81
STEEPBANK RIVER NEAR FORT MCMURRAY	07DA006	81
STIMSON CREEK NEAR PEKISKO	05BL007	82
STRAWBERRY CREEK NEAR THE MOUTH	05DF004	82
STREETER CREEK (MAIN STEM) NEAR NANTON	05AB030	83
SWAN RIVER NEAR KINUSO	07BJ001	83
THREEHILLS CREEK NEAR CARBON	05CE007	83
THREEPOINT CREEK NEAR MILLARVILLE	05BL013	84
TOUGH CREEK NEAR BEAZER	05AE039	84
TROUT CREEK NEAR GRANUM	05AB005	84
TWIN CREEK NEAR SEEBE	05BF018	85
VERMILION RIVER AT VEGREVILLE	05EE009	85
VERMILION RIVER NEAR HAZELDINE	05EE004	85
VERMILION RIVER NEAR MARWAYNE	05EE007	86
VERMILION RIVER NEAR VEGREVILLE	05EE003	86
WAIPAROUS CREEK NEAR THE MOUTH	05BG006	87
WAMPUS CREEK NEAR HINTON	07AF003	87
WASKATENAU CREEK NEAR WASKATENAU	05EC002	87
WATERTON RIVER NEAR GLENWOOD	05AD028	88
WEST ARROWWOOD CREEK NEAR ARROWWOOD	05BM014	88
WEST PRAIRIE RIVER NEAR HIGH PRAIRIE	07BF002	89
WEST STREETER CREEK NEAR NANTON	05AB022	89
WHIRLPOOL RIVER NEAR THE MOUTH	07AA009	89
WHISKEYJACK CREEK NEAR HINTON	07AD004	90
WILDHAY RIVER NEAR HINTON	07AC001	90
WILLOW CREEK ABOVE CHAIN LAKES	05AB028	91
WILLOW CREEK NEAR CLARESHOLM	05AB021	91
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05AA004	PINCHER CREEK AT PINCHER CREEK	63
05AA008	CROWSNEST RIVER AT FRANK	15
05AA010	BEAVER MINES CREEK NEAR BEAVER MINES	4
05AA011	MILL CREEK NEAR THE MOUTH	40
05AA022	CASTLE RIVER NEAR BEAVER MINES	12
05AA023	OLDMAN RIVER NEAR WALDRON'S CORNER	53
05AA024	OLDMAN RIVER NEAR BROCKET	45
05AA026	DUTCH CREEK NEAR THE MOUTH	17
05AA027	RACEHORSE CREEK NEAR THE MOUTH	65
05AA028	CASTLE RIVER AT RANGER STATION	12
05AB005	TROUT CREEK NEAR GRANUM	84
05AB013	BEAVER CREEK NEAR BROCKET	4
05AB016	LETHBRIDGE NORTHERN IRRIGATION DISTRICT CANAL AT MENZAGHIES BR	32
05AB021	WILLOW CREEK NEAR CLARESHOLM	91
05AB022	WEST STREETER CREEK NEAR NANTON	89
05AB023	MIDDLE STREETER CREEK NEAR NANTON	38
05AB024	EAST STREETER CREEK NEAR NANTON	10
05AB028	WILLOW CREEK ABOVE CHAIN LAKES	91
05AB029	MEADOW CREEK NEAR THE MOUTH	37
05AB030	STREETER CREEK (MAIN STEM) NEAR NANTON	83
05AD002	BELLY RIVER NEAR STAND OFF	6
05AD005	BELLY RIVER NEAR MOUNTAIN VIEW	6
05AD007	OLDMAN RIVER NEAR LETHBRIDGE	48
05AD028	WATERTON RIVER NEAR GLENWOOD	88
05AD037	PIYAMI DRAIN NEAR PICTURE BUTTE	64
05AD041	BELLY RIVER NEAR GLENWOOD	5
05AE002	LEE CREEK AT CARDSTON	30
05AE027	ST. MARY RIVER AT INTERNATIONAL BOUNDARY	81
05AE037	LEE CREEK AT BEAZER	30
05AE039	TOUGH CREEK NEAR BEAZER	84
05AF010	MANYBERRIES CREEK AT BRODIN'S FARM	35
05AH003	ROSS CREEK NEAR IRVINE	71
05AH005	SEVEN PERSONS CREEK AT MEDICINE HAT	72
05AH041	PELICAN CREEK NEAR PAKOWKI ROAD	61
05AJ001	SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT	79
05AK001	SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41	79
05BA001	BOW RIVER AT LAKE LOUISE	9
05BA002	PIPESTONE RIVER NEAR LAKE LOUISE	63
05BB001	BOW RIVER AT BANFF	8
05BB003	FORTY MILE CREEK NEAR BANFF	23
05BC001	SPRAY RIVER AT BANFF	80
05BF002	KANANASKIS RIVER ABOVE LOWER LAKE	29
05BF016	MARMOT CREEK MAIN STEM NEAR SEEBE	35
05BF017	MIDDLE FORK CREEK NEAR SEEBE	38
05BF018	TWIN CREEK NEAR SEEBE	85
05BF019	CABIN CREEK NEAR SEEBE	11
05BF020	MIDDLE FORK CREEK IN CIRQUE NEAR SEEBE	37
05BG006	WAIPAROUS CREEK NEAR THE MOUTH	87
05BH004	BOW RIVER AT CALGARY	8
05BH009	JUMPINGPOUND CREEK NEAR THE MOUTH	29
05BJ004	ELBOW RIVER AT BRAGG CREEK	18
05BJ006	ELBOW RIVER ABOVE ELBOW FALLS	18
05BK001	FISH CREEK NEAR PRIDDIS	22
05BL004	HIGHWOOD RIVER BELOW LITTLE BOW CANAL	25
05BL007	STIMSON CREEK NEAR PEKISKO	82
05BL009	HIGHWOOD RIVER NEAR ALDERSYDE	26
05BL012	SHEEP RIVER AT OKOTOKS	73
05BL013	THREEPOINT CREEK NEAR MILLARVILLE	84
05BL014	SHEEP RIVER AT BLACK DIAMOND	73
05BL019	HIGHWOOD RIVER AT DIEBEL'S RANCH	25
05BL021	HIGHWOOD RIVER BELOW PICKLEJAR CREEK	25
05BL022	CATARACT CREEK NEAR FORESTRY ROAD	12
05BL023	PEKISKO CREEK NEAR LONGVIEW	61
05BL024	HIGHWOOD RIVER NEAR THE MOUTH	26
05BM004	BOW RIVER BELOW BASSANO DAM	9
05BM008	CROWFOOT CREEK NEAR CLUNY	14
05BM014	WEST ARROWWOOD CREEK NEAR ARROWWOOD	88
05CA002	JAMES RIVER NEAR SUNDRE	28
05CA003	DEER CREEK (MAIN STEM) NEAR SUNDRE	15
05CA009	RED DEER RIVER BELOW BURNT TIMBER CREEK	68
05CA010	RED DEER RIVER AT SUNDRE	68
05CA011	BEARBERRY CREEK NEAR SUNDRE	4
05CB002	LITTLE RED DEER RIVER NEAR WATER VALLEY	32
05CC002	RED DEER RIVER AT RED DEER	67
05CC008	BLINDMAN RIVER NEAR BLUFFTON	8
05CC009	LLOYD CREEK NEAR BLUFFTON	33
05CE001	RED DEER RIVER AT DRUMHELLER	66
05CE006	ROSEBUD RIVER BELOW CARSTAIRS CREEK	71
05CE007	THREEHILLS CREEK NEAR CARBON	83
05CE008	ATUSIS CREEK NEAR REDLAND	3
05CE010	RAY CREEK NEAR INNISFAIL	66
05CE020	MICHICHI CREEK AT DRUMHELLER	37
05CG002	BULLPOUND CREEK NEAR HANNA	10
05CK001	BLOOD INDIAN CREEK NEAR THE MOUTH	8
05CK004	RED DEER RIVER NEAR BINDLOSS	69
05CK005	ALKALI CREEK NEAR THE MOUTH	1
05DA002	SIFFLEUR RIVER NEAR THE MOUTH	73
05DA007	MISTAYA RIVER NEAR SASKATCHEWAN CROSSING	40
05DA009	NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT	43
05DB001	CLEARWATER RIVER NEAR ROCKY MOUNTAIN HOUSE	14
05DB002	PRAIRIE CREEK NEAR ROCKY MOUNTAIN HOUSE	65
05DC001	NORTH SASKATCHEWAN RIVER NEAR ROCKY MOUNTAIN HOUSE	44
05DC002	NORTH SASKATCHEWAN RIVER AT SAUNDERS	43
05DC006	RAM RIVER NEAR THE MOUTH	65
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